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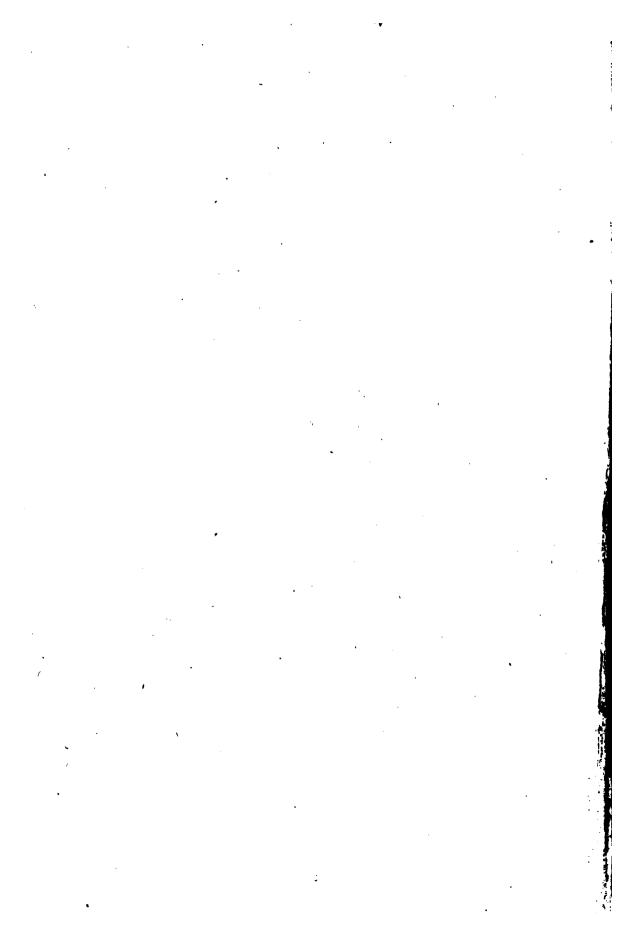
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# The Homæopathic Eye Ear and Throat Journal.

DEVOTED TO THE INTERESTS OF GENERAL PRACTITIONERS AND SPECIALISTS.

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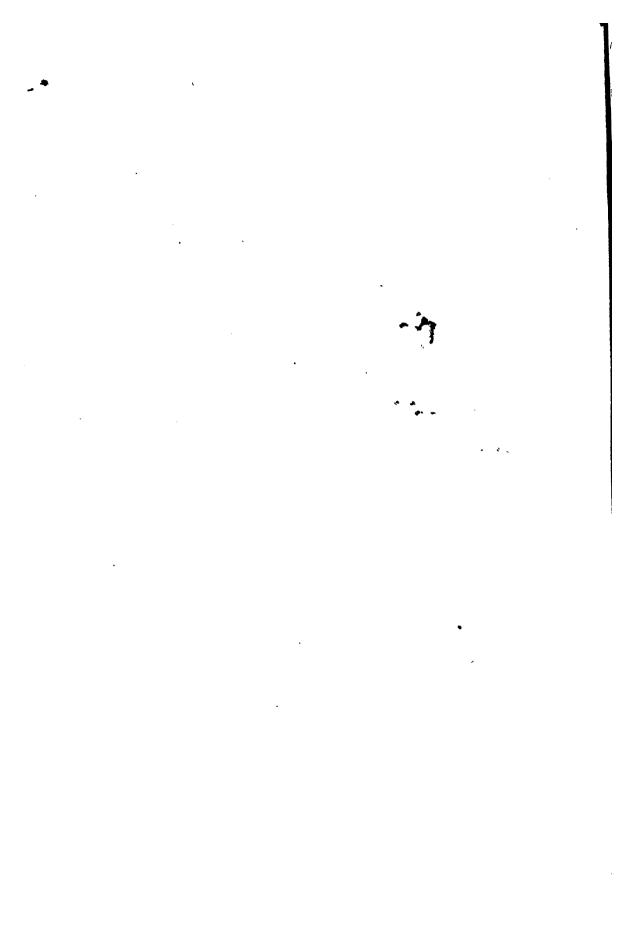
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S. R. C. OCT PARSON





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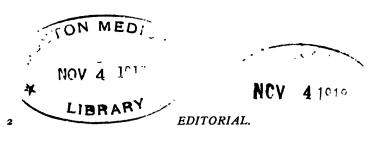
No. 1.

# EDITORIAL.

MEDICAL ENGLISH "AS SHE IS WROTE."

GAIN\* we urge upon the profession greater pains to be scholarly in terminology and literary style. (Some of our readers may remember the unconscious humor of the Spaniard who published a number of years ago a handbook for his countrymen entitled "English As She Is Wrote:") Misuse of prepositions and of medical terms is too common, and is on the increase in our books, lectures and papers. In part, this is carelessness; in part, it may be attributed to the influence of the daily press; even college graduates among reporters, when hurriedly writing their "stories," let slip incorrect colloquialisms which they have become accustomed to hearing among the lower classes, and neither editor nor proof reader has time to correct them. This may afford an explanation, but it is no excuse for such horrors as "remember of," and most instances of "permit of," "allow of," etc. The English language is alive and growing, therefore each of us is responsible that his influence upon it shall be for good and not destructive of its grammar and etymology. "Preventative," "diagnosticate" and "prognosticate" are inexcusable. diagnose a case, we do not make it diagnostic. Prognosticate means to make prognostic. Nowadays dictionaries follow instead of leading in the usage of words; they quote medical writers as their authority for certain medical expressions, and are giving currency to such glar-

<sup>\*</sup>Editorial, Journal of Ophthalmology, Otology and Laryngology, January, 1901, Presidential Address, New York State Homœopathic Medical Society's Transactions, 1903.



ing instances as the above because doctors who are otherwise scholarly afford quotations of their use.

We protest against continuing and justifying the use of inaccurate words upon the plea that "others do so." The following by Arthur S. Hardy applies to this, although written about morals and conduct:

"You and I, by our careless adoption of a rule of conduct less than the highest, by our easy conformity to things as they are, our half-hearted effort for things as they should be, are helping to breed the moral miasma which subtly steals into the fine constitution of the young souls about us, enfeebling and checking the free growth of right instinct, until at last the passionate protest against wrong is changed into dull acquiescence, and the voices that once cried with the Teacher: 'Be ye perfect!' murmur with fatal resignation the proverb ever on lips stiffening in moral paralysis, 'In Rome be as the Romans.'"

When wishing to use a shorter name for the turbinated bodies can we not agree upon "turbinals?" In November, 1902, the Journal of Ophthalmology, Otology and Laryngology published a symposium upon this which confirmed our opinion that when employed alone or as a noun turbinal, turbinals, is preferable to turbinate, turbinates; these latter are adjectives and should be followed with the words "body," "tissue" or "bone." So said Herman Knapp, Edwin Pynchon, Dorland, Gould, Dunglison, Thomas, Webster, the Century Dictionary. Mackenzie, Lennox Browne, Bosworth, Bishop, Sajous, M. A. Barndt, George C. Stout, W. F. Beggs, and others. In none of ten dictionaries is the noun given as turbinate or turbinated.

Will not you, "gentle reader," adopt the term astigmia instead of astigmatism, and astigmic for astigmatic, please?

In 1895 Dr. George Martin called attention\* to Rev. Dr. Whewell's error in coining the word astigmatic, which he derived from the Greek stigma, -atis, a point in the sense of a prick or a mark; the correct term is astigmia, from stigme, -es. which (|) means a mathematical point as aphonia is derived from phone, -es.

It is not too late, nor is it difficult, to correct this error; we are happy to note that an increasing number of oculists are using the more scholarly term, and are confident that the reform can be established as easily and as quickly as was the dioptric system if each teacher and every author would call attention to it. Editors and secretaries can

<sup>\*</sup>Annales d'Oculistique, December, 1895.

exert a powerful influence if they will, like the writer, announce that this substitution will be made in all MSS. passing through their hands; for over nine years no one has protested against such correction of his MS. by us.

The diphthong should be preserved in homoeopathy, even if it disappear from general use, because the word is etymologically meaningless without it.

Writers and lecturers are too prone to repeat the errors of others. For years there has been such disgraceful confusion in the use of the terms hemeralopia and nyctalopia that the dictionaries but make it worse. Dorland's American Illustrated Medical Dictionary is the only one that explains them properly, and even there the wrong usage is given as a second definition. If the teachers and text-book writers would but do their duty this confusion would soon and easily be rectified. If the syllable "al" and its derivation be not ignored there should be no confusion. Hemeralopia is from the Greek hemera, day, alaos, blind, and ops, eye; nyctalopia from nux, night, alaos, blind. ops, eye. What could be simpler? How can we confuse these?

Why do we lack the energy and—if you will, the courage—to be right, to be, to be scholarly? Are we Bourbons?

Almost all dictionaries give the long English sound to both i's in quinine. Despite this, many pronounce the word kin-een. In defense of this may be urged, (1) that the name was originally kinine; (2) that it was so named by the Parisian chemists, Pelletier, and Carentous, who isolated it in 1820; (3) why should we adhere to the English pronounciation of such words? It arose from the isolation of England and their conceited ignorance of one and two centuries ago.

How should we abbreviate membrana tympani, and its plural? Abbreviations are arbitrary, and the running together with but one period of mt., mm. (for millimeter) and cc. for cubic centimeter are instances of the progress toward simplification that one language is undergoing. In one of our recent issues\* the convenience was apparent of separate abbreviations for the singular and the plural of membrana tympani; we suggest mtt. for the plural, just as MSS. has come to be recognized as the plural form of MS.

<sup>\*</sup>This Journal for September, page 320. Despite proof reading typographical errors confused these on that page.

# BIOGRAPHICAL SKETCH OF PRESIDENT GARRISON.

OHN BOGGS GARRISON was born January 8, 1849, at Blawenburg, New Jersey, the son of Peter Sutphin and Hannah Boggs Garrison. On his father's side he traces his ancestry to the Douglas family, of Scotland, and the Sutphin. Stothoff and Van Zandt's, of Holland. On his mother's side the Old Dominion, Virginia, produced Captain John Boggs, his great-grandfather, who fought with the revolutionary armies in that state.

Educated in the public schools, he was instructor in the languages at Hopewell Seminary, and prepared for Princeton, but his health failed and he was obliged to follow an outdoor life for several years.

Ever since his graduation at the New York Homoeopathic Medical College and Hospital, in 1882, he has practiced in New York City. Was associated with the late Prof. Deschere in the clinic for diseases of children for several years, but then took up the study of the diseases of the throat and nose, receiving the New York Ophthalmic Hospital's Certificate in Laryngology in 1889; he served on the staff of that institution until 1904.

With Drs. A. B. Norton, George W. McDowell, and C. H. Helfrich, he brought out the Homeopathic Eye, Ear and Throat Journal in 1895, and was the business manager until he retired from the work in 1904.

He is a member of the American Institute of Homœopathy since 1892, of the New York State Homœopathic Medical Society, 1888, New York County Homœopathic Medical Society, Pathological Society, Materia Medica Society, of the Unanimous, Meisen. and Republican Clubs. Since 1901 he has been one of the State Medical Examiners representing the homœopathic school.

# A PLEA FOR MORE CAREFUL DIFFERENTIATION OF NASAL DISEASES.\*

J. W. STITZEL, M. D.,

# Hollidaysburg, Pa.

ELLOW members of this society, how often are you asked the question, "Doctor, can you cure catarrh?" The laity seem to be imbued with the idea that catarrh is an incurable disease, and all that we can do is to administer palliative measures. Now who is responsible for this fallacy upon the part of the laity? From personal observation, I am convinced that nearly all cases of nasal disease are diagnosed by the general practitioner as catarrh. And while it is true most cases of disease of the nose have an associated catarrhal condition, few cases of long standing are uncomplicated cases of chronic catarrh.

In the great majority of cases the catarrh is only an associated condition, and the real cause of the trouble is found to be one of the numerous causes of nasal obstruction, as a deflected septum, septal spur, enlarged turbinated body, nasal polypi or adenoid vegetations. On the other hand, we may have, and too often do have, an unrecognized disease of some of the accessory sinuses.

It is just as sensible to expect to cure a case of chronic diarrhoea with opium suppositories as to expect to cure a nasal catarrh with an obstructed nares or an associated nasal sinusitis, without first removing the cause of the nasal obstruction, or applying the appropriate treatment to the diseased sinuses, as the catarrh in these cases is only a result of the condition just mentioned, and you will find in the great majority of cases of nasal disease catarrh is only one of the symptoms of the whole trouble; as true followers of Hahnemann, we should get at the totality of the condition.

For a thorough understanding of the subject under consideration, it will be necessary for me to give a brief description of the anatomy of the internal portion of the nose. The nasal passages have been aptly

<sup>\*</sup>Read before the Pennsylvania Homœopathic Medical Society at Altoona.

termed double air tunnels, beginning at the anterior nares and continuous posteriorly with the pharynx.

These tunnels are separated from each other by a thin partition of bone and cartilage, the bony portion predominating and forming the posterior portion of the partition.

Normally the septum is vertical, but after the seventh year it is quite frequently deflected, usually to the left. This condition being known as deviation of the septum.

The septum forms the inner walls of the nasal passages. The outer walls are very irregular, being made so by three and sometimes four shelf-like processes of bone, which project inward toward the septum, but do not touch it; from their scroll-like form these are called the turbinated bodies, or the turbinals. They gradually decrease in size from below upwards. The third, the superior, is quite small, and projects almost vertically from the roof.

Beneath the superior is the middle turbinal, larger and broader and more rolled at its center than the superior, and projecting horizontally instead of vertically. It is on the anterior free margin of this turbinal that we find a small elevation directed downwards, the aggar nasi, and opposite a corresponding slight elevation on the septum. These two points are important, as they mark the line between the olfactory area above and the respiratory area below.

The inferior or lower turbinal is the longest and largest of the three, and assumes more nearly a horizontal position; it differs from the rest in being a separate bone.

Underlying these shelf-like processes of bone, or between each adjoining pair of turbinals and between the inferior turbinal and the floor of the nose, is a depression or space known as a meatus. These spaces from above downward being known as the superior, middle and inferior meatuses.

Into these meatuses open the accessory sinuses, which, on account of their direct communication with the nasal cavity, are liable to infection through a direct extension of diseased processes involving the nose.

The middle meatus is of special interest or importance in the discussion of the subject under consideration: for opening into the middle meatus we have the canals from the frontal sinuses (the infundibuli), from the anterior ethmoidal cells and from the antrum of Highmore. Within this meatus we have a crescentic opening, the

hiatus semilunaris. This opening continued upwards leads into the frontal sinuses, and downward into the antrum of Highmore, as illustrated in plate No. 1.

From what I have just said and shown you from plate No. I, you will appreciate the difficulty in telling just which of these cavities is effected when we have a collection of pus in the middle meatus, due to suppuration of either of them. And you will also appreciate the fact that the antrum of Highmore frequently becomes infected from a direct drainage of pus from the frontal sinus into it in case of an in-

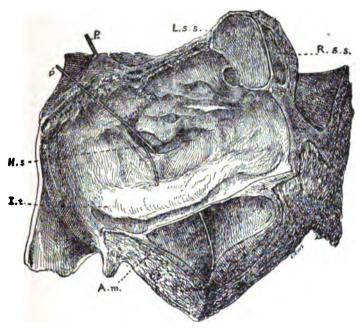


Fig. 1.—The probes show the route that fluids may take from the frontal sinus to the antrum. The palatal process of the superior maxilla and the middle turbinal have been removed. (The print is oblique; turn about 30° to the right.)

fection of the frontal sinuses or of a frontal sinusitis. It is often a difficult procedure to tell just which sinus has been primarily involved, and from the location of their openings it is often impossible to tell by simple inspection from which sinus the discharge is coming; we have to resort to transillumination or to an exploratory operation for the purpose of inspecting one or both sinuses.

Opening into the superior meatus we have the posterior ethmoidal cells and sphenoid sinuses.

The accessory nasal cavities or sinuses are four in number: the sphenoidal, ethmoidal, frontal, and maxillary or antrum of Highmore.

Of these the sphenoidal sinuses are two irregular cavities in the body of the sphenoid bone, separated from each other by a thin plate of bone. They are absent in children but develop as age advances. They open into the superior meatus at its upper and posterior part.

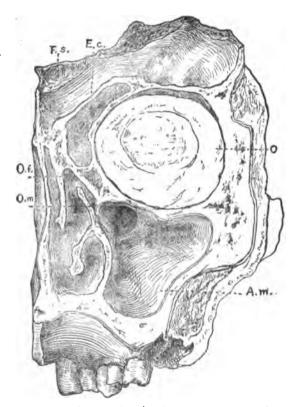


Fig. 2.—Transverse vertical section passing through the ostium maxillare.

The ethmoid sinuses, more properly termed the ethmoid cells, are found in the lateral mass of the ethmoid bone and are composed of a number of small cells, thus resembling the mastoid cells; they are divided into three groups, separated by thin partitions of bone: the anterior, middle and posterior ethmoidal cells. The posterior cells are

less numerous than the others; they occasionally communicate with the sphenoidal sinuses and open into the superior meatus.

The anterior ethmoidal cells open by means of small orifices into the canals from the frontal sinuses, which open into the middle meatus at its extreme anterior portion, the hiatus semilunaris. The ethmoid cells are shown in figure 3.

The frontal sinuses are two small cavities lying between the two tables of the frontal bone and extending some distance over each orbit,

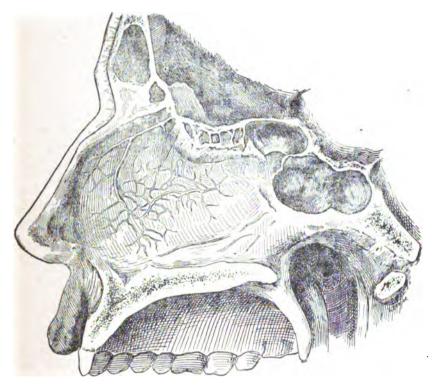


FIG 3.—Sagittal section showing the right frontal ethmoidal and sphenoidal sinuses.

thus giving rise to the prominence over the root of the nose. They, like the sphenoidal sinuses, develop with advancing age; they communicate with the middle meatus by the infundibuli.

NOTE.—These illustrations are reproduced from the 20th Century Practice of Medicine, through the courtesy of Wm. Wood & Co., its publishers.

The antra of Highmore, or maxillary sinuses, are the largest of the accessory cavities. They vary in size in different races and also in the same individual; one may be much larger than the other or entirely absent.

These cavities are situated one in the body of each superior maxillary bone. The floors of these cavities are formed by the alveolar processes of the superior maxillary bones, and the roots of the first and second molar teeth are often found projecting into these cavities.

They open into the middle meatus near the posterior part of the hiatus semilunaris by a circular opening, the ostium maxillare; occasionally we have a second opening behind this—the ostium maxillare accessorius.

The nasal cavities and accessory sinuses are lined with a mucous membrane. This membrane varies greatly in character in different localities; in the upper or olfactory area we have tesselated epithelial cells, and the color of the membrane is yellowish pink, while the lower or respiratory area is lined with ciliated epithelium, and the color is a light pink. The deeper layer of this membrane, or the submucosa, which lies in contact with the inferior turbinal, the crest of the middle turbinal and the corresponding part of the septum, is chiefly made up of an erectile cavernous tissue, the venous network forming large cavernous sinuses, rendering them capable of sudden distension under vasomotor disturbance. This accounts for the sudden closure of the nose so common in acute colds in the head or acute rhinitis.

The first principle of a healthy condition of the nasal passages is free and unobstructed nasal respiration. Any deviation from this is sure to produce disease of the nasal mucous membrane. How often we see cases of deflected septums later in life that are due to some neglected injury in early life. Possibly no attention has been paid on the part of the parents to a fall on the face, a blow or some like injury to the nose, or the family physician has been called in and after a superficial examination declares the little patient will be all right in a few days, and we have laid the foundation for nasal obstruction and consequent mouth breathing with all its dire results, as pharyngitis, frequent attacks of bronchitis, etc.

Or on the other hand, the injury may have been so slight as to interfere but slightly with free nasal respiration, yet we have the foundation laid for future catarrhal condition due to the irritating presence of a nasal spur. These cases are easily prevented, if proper attention is paid to them and a careful examination made at the time of injury.

The same may be said of the infective cases of rhinitis so prevalent during epidemics of the grip. Many a case of suppuration in one or more of the accessory cavities is allowed to continue untreated until the discharge causes the actual destruction of tissue within the nasal cavity, and we have a marked atrophy with an ozena.

It is not my intention to discuss the question whether the crusts and offensive discharges of atrophic rhinitis come from the mucous membrane or from the accessory sinuses, but in my own experience every case of atrophic rhinitis with crust formations and foul odor (the so-called ozena) coming under my observation has been directly traceable to a suppuration in some of the accessory sinuses, and while these cases were markedly benefited by the ordinary methods of treatment, as thorough cleansing followed by the application of stimulating drugs to the nasal mucous membrane, yet the disease was not cured until appropriate treatment was directed to the diseased sinus.

There is no doubt in my mind that the accessory sinuses are much more frequently affected than is commonly supposed. Many cases of acute sinusitis run their course and get well without treatment, like any other acute disease. But a certain percentage do not tend toward recovery, and through failure in diagnosis we have the foundation laid for a future ozena.

Pus in the middle meatus should always arouse a suspicion of some trouble in the accessory cavities. You will see cases which after trouble in the accessory cavities. You will see cases in which after repeatedly blowing the nose forcibly until apparently there is no more secretion, after application of some astringent to the middle meatus will or can expel large quantities of pus and mucus.

Where was this secretion? Certainly it was not in the nasal passages proper; for if you take into consideration the fact that the nasal passages are practically straight tubes the secretion would certainly have been expelled at the first effort. Considerable quantities of discharge escaping at one time can only originate in one of the large cavities, as the antrum or frontal sinuses, and by reducing the turgescence within the nose the exit of the sinuses has been opened more freely, thus allowing free drainage, and the suction caused by the expulsion of the air due to the forcible expiration has tended to empty the affected sinus.

Whenever you have large accumulations blown from the nose periodically, look for trouble in the accessory sinuses.

The position of the head of the patient has a great deal to do with

the drainage of the different cavities and the consequent easy escape of secretions. The antrum is most easily drained (as shown in figure No. 2) when the head is inclined forward and to the opposite side.

In patients giving you a history of a flow of pus from the nose or throat on awaking and sitting up in bed in the morning, the nostril till then having been free from discharge, you will usually find the trouble in the antrum, and the suspicion of antral trouble is strengthened if we have pus in the middle meatus after having the patient bend his head forward to between the knees and at the same time incline it to the opposite side.

The other sinuses are best drained when the head is erect. But if you find pus in the middle meatus remember it may also come from the anterior ethmoid cells or from the frontal sinuses.

It is not my purpose in this paper to go into a detailed description of the various methods of diagnosing sinus diseases by transillumination, exploratory puncture, etc., for these belong to the province of the nose and throat specialist, and after all the diagnosis can only be established by the actual presence or proof of pus in the diseased cavity; it is very difficult in many cases to tell from the presence of pus in the nasal passages just which cavity is affected.

It is sufficient for my purpose to establish the fact that pus is coming from one of the accessory sinuses. Neither is it my purpose to describe the various forms of nasal obstruction that lay at the foundation of most cases of catarrh; for certainly every physician who attempts to treat diseases of the nose can easily demonstrate to his own satisfaction, with a nasal speculum and a head mirror, the presence of a nasal spur. deviated septum, enlarged turbinal or nasal polypi causing the obstruction.

Yet I am convinced that very often, at least too often, cases of socalled catarrh are simply prescribed for without making the slightest effort to inspect the nose and discover the cause of the trouble.

Is it any wonder that under such circumstances little or no results are obtained, that the laity are impressed with the fact that catarrh is an incurable disease, and that treatment at the best is only palliative?

To better illustrate the truth of what I have just said, and at the same time simplify my subject, let me cite a few cases that have come under my observation within the last two years:

CASE I.—Miss B., age 12 years, had been treated for four or five months with some benefit, but trouble had returned. Mother said she

was continually sniffling and blowing something from her nose, and could not breathe properly through the nose. On inspection I found both nostrils partily occluded and filled with mucus; the nasal mucous membrane was much swollen.

After treating her a short time with little improvement, I examined her more closely, and discovered adenoid vegetations, which were causing a continual passive congestion of the nasal mucous membrane with consequent formation of mucus and stoppage of the nose. trouble promptly disappeared with the removal of the adenoids.

CASE II.—A. S., age 14, had been treated about a year for catarrh. His mother told me that he could not get his older brother to sleep with him, for he threw himself all over the bed, and was very restless at night. At times could not breathe through the nose.

On examination I found the left nostril completely filled with polypi, which even hung down into the pharynx. I removed fourteen at two

sittings, the last one being the largest polypus I ever saw.

It hardly seems credible that such a condition could exist without

the hardy seems credible that she a condition could exist without being discovered—certainly not be an a condition could exist without being discovered—certainly not be an any property of the state of the nose—but I have seen a number of organiar cases.

Case III.—Mrs. C., acroo, came to me to be inted with glasses. On examination I found vision in thigh a 1912 suced to \$\frac{1}{200}\$ with marked contraction of field of vision.

On questioning her more closely T found she had been treated for some time for catarrh; she was having as tead deal of pain in the head, had a marked tenderness under the light orbit and a foul discharge from that side of the nose. On inspecting the nose I found out in the from that side of the nose. On inspecting the nose I found pus in the middle meatus. Her condition dated back to an attack of grip about a year previous to this visit.

By appropriate treatment to the diseased sinus she made a complete recovery with return of good vision.

CASE IV.—Miss F., age 20, came to my office for treatment for a typical case of atrophic rhinitis with crust formation and foul discharges from the nostrils. Crusts formed in both nostrils but were worse on the left side. After treating her for some time the crust formation disappeared entirely on the right side, but continued on the left side, although crusts were lessened in quantity and the odor had nearly disappeared.

On closer inspection, I discovered I could stop the crust formation by plugging the middle meatus. The whole trouble disappeared promptly upon directing the proper treatment to the diseased sinus.

CASE V.—M. S., age 12 years, called at my office accompanied by his mother, who wanted to know if I could not give him something for his breath, as he could hardly get his breath on exerting himself unduly. He had been taking medicine for some time without relief. I looked at his nose and found a marked deviation of the septum to the right side. He had been struck on the nose with a base ball about fifteen months previous to this, but had said nothing about it to his parents for fear of being punished; he acknowledged that his trouble dated back to the time of the injury. On the opposite side from the deflection he had a marked compensatory hypertrophy of the inferior turbinated body, which I first reduced and then straightened the septum; he had no further trouble with his breathing.

Case VI.—My last case illustrates the fact that even the nose and throat specialist at times does not carefully differentiate his nasal

cases.

Mr. M., age 21 years, was brought to me last April by a graduate of last year, who had diagnosed adenoids and wanted me to remove them.

On taking a history of the case I found patient had been treated daily the whole of last December by a well known nose and throat specialist for an ordinary naso-pharyngitis. He had a great deal of mucus in the nose and throat, the nasal mucous membrane was much swollen, turbinals enlarged, nares obstructed, and there was a gradually increasing deafness.

After reducing the turgescence within the nasal passage, the

adenoids could be plainly seen hanging down into the pharynx.

I removed the adenoids entire with Gradle's adenotome. How they could have been overlooked in this case is hard to understand, yet as I said before one of Philadelphia's most prominent nose and throat specialists failed to discover them.

I could cite many more cases, but time will not permit. It is not my

purpose to take up the treatment of nasal diseases.

But let me say in closing, that while you may benefit the catarrhal condition by cleansing the nostrils and applying the various sprays and local applications to the nasal mucous membrane, thus aiding drainage and protection and stimulating the mucous membrane yet you can only expect to cure your cases by going to the very fountain head of the trouble, and if the catarrh is due to nasal obstruction, remove the obstruction, and if due to disease of the accessory sinuses, direct the appropriate treatment to the diseased sinus; you will then cure your cases, and the laity will no longer have reason to doubt the curability of catarrh.

Follicular Conjunctivitis is distinguished from trachoma in that the follicles are not gelatinous, they are redder, and more prominent; they are scanty or absent in the upper fornix, are most commonly found in the lower retrotarsal fold. Definite diagnosis from trachoma can often be made only by observing the subsequent course; in follicular conjunctivitis contraction and scarring of the conjunctiva and corneal complications never occur.

# IMMATURE CATARACT.

DEAN W. MYERS, M. D.,

# Grand Rapids, Mich.

HE crystalline lens offers a field for endless study. Especially is this true when it begins those remarkable changes which sooner or later result in blindness. A crystalline structure of epithelial origin, composed of thin, flattened, six-sided, fiber-like cells and reposing in a clear homogenous capsule, it responds to every ray of light, flattening or thickening as the rays come from far or near. The exceedingly delicate fibers, cemented together by an elastic cement substance, glide over each other, changing shape and position as the demands of the seeing function present themselves. Without blood supply, and consequently on limited nourishment, this function is performed unceasingly, and how often at what an expense of distortion for years, overcoming the many uncorrected errors in refraction. How often we find after a successful extraction that the compensating lens requires a decided cylinder to complete correction, nor do I believe this astigmia to be entirely the result of the operation.

ETIOLOGY AND PATHOLOGY.—Whatever may be the exact pathological changes resulting in opacities of the lens, it must be admitted that these changes are due to faulty nutrition or to disturbances in the natural nutritive processes whereby the new elements of the lens are supplied and the old and wornout ones removed. As the nutrition of the lens comes largely from the vitreous, and as this substance is secreted largely by the ciliary body or retina or both, it is apparent that diseases of these tissues, as well as the various other structures so intimately associated with them, may result in chemical changes sufficient to produce opacities in the delicate fibers of the lens. Obstruction to the exit of fluids can produce the same results from stasis.

In this connection Geuns has made some valuable and interesting experiments, which have been translated by Huizinga. In these experiments cataracts were produced by ligating the venæ vorticosæ; the process of change is as follows:

T

- 1. Swelling of the cortical fibres of the lens.
- 2. Development and increase of epithelium at the posterior capsule. In a few instances this epithelium developed into lens fibers.
  - 3. A displacement of the nucleus backwards.
- 4. Separation of the secondary capsule of the cortical layer by the epithelium.
  - 5. Formation of a transudate between the capsule and lens cells.
  - 6. Splitting of the lens substance according to the preferred seams.
  - 7. Formation of the transudate between the fibers.
  - 8. Softening and changing into fluid of the cortical fibers.
  - 9. Swelling and softening of the central fibers.
  - 10. Formation of fat cells and calcareous deposits.

II.

These changes may all follow each other in the order given or the first four or five only, according to the amount of stasis and according to the rapidity with which collateral circulation is re-established.

III.

When circulation is slowly re-established, a total cataract results.

IV.

When the circulation is rapidly re-established, there will only be a change in the lens epithelium.

V

The lens capsule is a membrane whose consistency is not affected or changed by the stasis. Whether the lens increases or diminishes in size, it always remained a closed capsule.

VI.

Fluids pass through only by osmosis and not by filtration.

The earliest demonstrable lesions are usually located at the lower inner quadrant.

Thomson, of New York, says: "The lens continues to grow all through life by the proliferation of the epithelial cells at the equator, and as this is only partially compensated for by the shrinkage and sclerosis of the nucleus, the size of the lens increases continually. After the fibers are of a certain age degenerative changes invariably set in, caused by the imperfect nutrition afforded the fibers through the dense lens capsule. As would naturally be supposed, the central fibers being the oldest are the first to become affected.

The lens capsule is a dense structureless membrane, which seems impervious to cellular invasion under ordinary conditions, and which

only permits the passage of such elements of the lymph stream as are needed for the nutrition of the fibers. Norris, in his article on the lens (System of Diseases of the Eye, Vol. IV., p. 296), suggests that there may be channels of escape through the capsule along the insertion of the zonular fibers.

The opacities which call especially for our consideration in this paper are the beginning or incipient cataracts, or those that have appeared producing disturbances of vision, but remaining more or less stationary for a period of years. Perhaps the cataract most difficult to deal with is the one presenting in early old age—at 50 to 60 years—and developing very slowly, or remaining stationary for an indefinite time. This cataract is usually that form of the cortical variety which begins with narrow radiating lines from the periphery. Sclerosis rather than active degeneration of the lens fibers is found to be the process in these lenses and results in a very slow development of the opacities. It is perhaps the more common of the cortical degenerations and is associated with shrinkage and sclerosis of the nucleus causing separation between the cortical fibers, which become filled with granular material.

"These changes are in their nature extremely slow, and at first may cause no perceptible opacities in the lens, though usually the lens fibers ultimately undergo degeneration. A common example of this is found in the sector-like opacities, superficially situated, which run in from the equator, and which so commonly exist for months and even years, with only the slightest signs of progression. Separations deeper in the cortex, from their inaccessibility to the nutritive stream, are more apt to be followed by early degeneration of the surrounding fibers. These separations become filled with a homogenous substance, which sooner or later becomes granulated and coagulates, forming the so-called spheres of Morgagni." The fibers bounding the fissures may remain fairly normal for a considerable time, even to ripe old age

Thomson says, however, "They usually degenerate in one of several ways. They swell up and become granular, finally breaking up into spheres of Morgagni, or they undergo fatty degeneration and break down, becoming ultimately semifluid in either case. Often drops of fluid collect between or in the cells. During these changes it is not uncommon to find nuclei in the cells in places where they are normally nonexistent. The origin of these nuclei is not always readily to be traced, but they have been repeatedly found where the capsule was, so far as could be determined, intact, and they undoubtedly arise from

proliferation of the epithelial nuclei in the fibers. This proliferation takes place to a limited extent in all cases of senile cataract, and seems to be nature's effort to repair the loss of substance in the lens."

This may explain the cessation in the development of certain cataracts and their extended stationary condition. Nature's effort at repair stops the progress, but owing to the limited excretion permitted by the capsule she is unable to carry off the granular and coagulated substances which have accumulated between the fibers, and the cataract remains in an immature or undeveloped condition, perhaps for years.

The microscopical study of this feature is at once limited, from the fact that the patient either retains the lens throughout life or that degenerative changes ultimately set in, so that at the time of extraction it is impossible to determine what the earlier conditions have been.

I would be glad if this society would take up this special feature of cataract, and would recommend that all immature cataracts removed be saved and careful microscopical study of them be made. If it could be established that proliferation actually begins with the first separation of the fibers, and that nature actually attempts a compensation, it would give us at least one suggestion for treatment, i. e., rest. No use of the eyes for close work at all. Errors in refraction corrected for distant vision and these glasses worn constantly.

### DISCUSSION.

E. D. REED (Ann Arbor): It is needless, perhaps, to comment upon the importance of the study of the nature of cataract and the conditions surrounding it. The dread of the knife is almost an instinctive one, and a successful treatment of any surgical condition by other than instrumental means marks a great advance in the science and art of medicine.

The study of the physiology and pathology of the crystalline lens has been a sadly neglected field, and it is indeed strange that a condition so widely distributed as is cataract should remain shrouded in so much mystery as regards its causes and early history.

The microscopical study of the lens has given little of value to the subject of lens pathology, as the very nature of microscopical echnique is sufficient to produce changes which are far greater than those in the early stages of cataract, and it is in these early stages that we stand helpless in the treatment of this condition.

Quotations from a recent report of the University of Michigan

laboratory will assist in this study.

The study of ions in their relation to physiology and physiological chemistry is at the present time one of the most interesting fields of

research. Notable in this line are the achievements of Loeb and his students, whose work relating to the influence of ions on the living cell has been epoch-making in the science of biology. No less noteworthy are the physical-chemical researches upon colloidal solutions by Hardy and others. The laws governing such solutions, and the methods of physical chemistry applied to the protoplasm of the living cell, have led to the most pertinent and important facts regarding the

nature of life processes.

The work of Loeb is too widely known to require detailed description. Suffice it it say that Loeb and his associate, Matthews, have shown that the most important processes of living protoplasm are influenced to a greater or less degree by the action of ions, and, further, that ions act by virtue of their electrical charges. It has been shown, too, that many, if not all, the properties of an element, are due to the nature of the electrical charges carried by it. For example, the property of valency has been shown to be due to the number of electrical charges possessed by the given element. Mono-valent sodium, for instance, carries one positive charge; di-valent calcium carries two positive charges; tri-valent aluminum carries three positive charges.

Loeb has found in his experience that small amounts of di-valent cations neutralize the physiological effects of large amounts of monovalent katons. Lillé has shown that the toxicity of sodium chloride solutions toward ciliæ may be neutralized by minute quantities of di-valent calcium or magnesium. and that tri-valent elements in almost infinitesimal quantities possess antitoxic power toward elements of lesser valence. It has also been noted that these same antitoxic bodies are themselves capable of being toxic when used alone, and can be

neutralized by minute quantities of elements of higher valence.

In his work upon colloidal solutions, Hardy has shown that the state of aggregation can be changed by the presence of ions, and that this power bears no quantitative relation between cause and effect. A change of aggregation from the hydrosol, where the colloidal particles are suspended in the fluid and in a state of motion, to hydrogel, where they are precipitated and the fluid has assumed a jelly-like form, may be brought about by anything which destroys the equilibrium of the hydrosol. Hardy's work was with silicic acid and egg white. He has demonstrated that the force which holds the particles in suspension is electrical, and that the fluid which surrounds the particles is oppositely charged. In a colloidal solution the particles move in the same manner as do ions, and when their charge is taken away they precipitate, coagulate, or, as it is usually termed, they assume the state of the hydrogel.

This change in aggregation of colloids may be brought about by the direct current, or by the introduction of ions carrying opposite charges to the colloidal particles. In the case of ions the coagulative effect increases with the valency according to the ratio:

 $V^1: V^{11}: V^{111} = X: X^2: X^3$ 

Colloidal solutions may be positive or negative; but there is a point

of iso-electric tension between the particles and the fluid surrounding them which is destroyed by the slightest change in potential, whether that be brought about by the introduction of an oppositely charged ion, or by the direct current. For example, the hydrogel of silicic acid, which is electro-positive, may be caused to assume the hydrosol by the addition of an infinitesimal amount of the negative hydroxyl ion (O H). If to a solution of egg white, which is electro-negative, one adds a very minute amount of aluminum sulphate, there is a coagulation of the solution.

To the class of bodies known as colloids belong the proteids, the ferments, and all protoplasmic structures, and it can be readily seen that the possibilities in the study of colloids from any standpoint are not only of great interest, but also of great significance in the knowl-

edge of life processes.

The crystalline lens is made up for the most part of proteid, viz., a soluble and an insoluble globuline. There are also present small amounts of inorganic and organic salts. The lens is surrounded by the refractive media which differ from each other only in the relative proportion between the soluble and insoluble globulines. The lens itself is separated from the aqueous and vitreous humors by a semi-permeable membrane, the lens capsule, which allows diffusion between all of the refractive media. In every way the crystalline lens may be considered as a colloidal solution contained in a sac which is a semi-permeable membrane, and the colloidal particles in a fluid holding in solution inorganic and organic salts.

We have experimented at the Laboratory of Ophthalmology, University of Michigan, with the purpose of determining, if possible, a causal relation between a changed state of aggregation of the colloid lens and the pathological condition of cataract. Our experiments in detail are given elsewhere, and it will be sufficient to give our results

in general here.

We have found that a carefully neutralized lens extract can be coagulated by very minute quantities of electrolytes, the kations. Experiments upon the lens within its capsule showed that the conditions were somewhat differen, but clouding could be caused here by extremely dilute solutions, and in some cases this clouding or hydrogel was reversible; for example, the clouding caused by the mono-valent kations could be cleared by distilled water.

That the clouding or coagulation was not caused by dehydration was proved by the fact that solutions too dilute to cause dehydration were used and coagulation promptly occurred. This fact was especially

true of the di-valent kations.

From experiments of Loeb and others we may expect to find an antitoxic effect of di-valent as opposed to mono-valent, and tri-valent as against di-valent kations. That is, for example, a solution containing a sufficient number of ions of a di-valent element to cause coagulation may be completely retarded or modified by almost infinitesimal quantities of tri-valent elements, and this possibility must be carefully considered in the study of the effect of ions upon the lens when one considers the complexity of the composition of the fluids surrounding the

colloid particles of the rafractive media.

If we consider the lens as a colloidal solution contained in a semipermeable membrane, we must conclude that the particles of this solution vary from time to time in their relation to the surrounding media. Defects in the metabolism of the lens may cause it to reach a point of iso-electric tension; then the slightest cause, as, for example, an increased salt content of the vitreous or aqueous humor may add to the iso-electric lens a sufficiently charged ion to cause a change in potential followed by a change of aggregation of the lens particles with a resulting clouding. An injury to the capsule, it will be seen, must inevitably result in the coagulation.

That the lens capsule must be taken into consideration as an important factor may be inferred from the work of Nernst upon the cell membrane. Nernst says that the changes in the cell caused by the electric carriers (ions) is not the same in all places, and, moreover. differs in different parts of the cell. This fact is due to the semi-permeable membrane, the cell covering or basement membrane as it is called, and it is only within the membrane that the unbalanced condition is present and the chemical changes occur which are the sources of electric stimulation.

This statement of Nernst helps to reconcile several features of cataract formation viewed from the standpoint of colloidal solutions. In the case of the lens capsule we have to do with a semipermeable membrane, and it may be here that all the causes lie which have for their effect the clouding and coagulation of the lens substance. This is quite in accord with the fact that cataract develops insidiously, for we know that the changed electropotential which causes coagulation is not necessarily continuous, but occurs at irregular intervals.

Since this work was undertaken there has appeared an article by Grille, which is very significant in its bearing upon the theory that cataract is a result of changed electrotension in the refractive media of the eye. Grille has found that patients with incipient cataract show a defective elimination of salts, and that there is present a vascular hypertonicity. This hypertension also exists in the fluids surrounding the crystalline lens. Such a condition as described by Grille is an ideal state for the production of a change in the electrical tension of the lens and a consequent change of aggregation of the colloidal particles.

If it can be successfully shown that the clouding of the crystalline lens is due to a disturbance of molecular concentration of the body fluids and a consequent change in the state of aggregation of the colloid particles of the lens a rich field is at once opened for the development, not only of a prophylactic treatment, but a curative treatment of cataract by the study of physical chemical methods whereby the normal equilibrium and electrotension can be maintained within

the organism.

## FRACTURE OF THE NOSE A CAUSE OF OPHTHALMO-PLEGIA—REPORT OF A CASE.\*

J. IVIMEY DOWLING, M. D.,

## Albany, N. Y.

HE symptoms of ocular paralysis are sufficiently characteristic to indicate the muscles involved and nerves affected, but may prove misleading in locating the site of the nerve lesion, or deciding whether it is an organic or merely a functional disturbance.

There are numerous causes: by many syphilis and tubercular meningitis are considered foremost, the infectious fevers and rheumatism are important factors, tumors of the brain and spinal affections may also be responsible, and fractures of the skull and those involving the nasal structures are potent agencies.

In order to realize the occasional serious damage to the eyes that may result from a fracture of the nose, it is merely necessary to recall the nerve and vessels transmitted by the optic foramina and sphenoidal fissures and their proximity to the sphenoidal sinuses which communicate with the nasal fossæ. The relation of the ethmoidal cells to the nares and orbits should also be borne in mind.

Extensive injury may involve either the sinuses or cells, and through the continuity of the parts the reactive inflammation may extend to the nerves and vessels transmitted by the sphenoidal fissures and optic foramina, or to the cellular tissues of the orbits.

Ocular paralyses of uncertain origin are suggestive of sphenoidal disease. A sensation of pressure behind the eyes and exophthalmos are indicative of ethmoidal complications.

Cases that result from injury to the nose are satisfactorily treated after correcting the trauma, but otherwise the paralysis becomes progressive and leads to disastrous results.

The symptoms resulting from such an injury simulate those of rheumatic origin and partake of the type of recurrent paralysis.

<sup>\*</sup>Read before the New York State Homocopathic Medical Society.

The purpose of this paper is simply to emphasize the fact that fractures of the nose are possible causes of ocular paralysis, which are frequently overlooked, with the result that all prescribed treatment results in failure. The type of recurrent paralysis which tends to progress, and with each successive attack proves more disastrous, is suggestive of nasal fracture as an active cause.

Without further discussion of the subject, I wish to present the following record of such a case in which the actual cause had been overlooked, with the result that all treatment was useless until the proper surgical care of the nose had been instituted.

### THE HISTORY IS AS APPENDED.

HISTORY.—Patient's statement of recurrent paralyses affecting muscles of both eves with decided ptosis. First attack mild and soon recovered without treatment. Second attack more severe, and treatment then instituted and continued during past six years off and on without benefit. Every recurrence was more disastrous and less responsive to treatment until at time of consultation he had given up hope. The symptoms were most apt to recur in winter, and were always aggravated during a storm. The treatment had consisted in the use of strychnia, sulphate and potassium iodide. Finally he was told there was no hope of benefit. He then resorted to blisters, and applied them above the eyes, with the result that the right lid was partially elevated, and had since remained so, thus permitting him to read by tilting the head back. Blistering had no effect on the left lid. During the earlier attacks vision was little impaired, but finally he was troubled with transient periods of clouded vision, which became constant, with gradual increase of other symptoms.

Additional details concerning previous personal history were obtained in answer to questions. Acquired syphilitic infection was denied, and patient presented no evident signs that such had ever existed. General health had always been good, and he had never suffered from attacks of rheumatism. His habits had been good; he had always enjoyed active outdoor sports, and had been an ardent base ball player until incapacitated by the progress of the paralysis.

In reply to inquiry concerning any remote injury to head or nose I learned that only a few months previous to the primary paralytic attack he had suffered a severe fracture of the nose during the course of a game of base ball. The fracture had never been properly set, and

the subsequent abnormal union occasioned marked nasal obstruction. However, the subsequent impairment of nasal respiration was considered by the patient as a mere discomfort, and the injury which occasioned it was long since forgotten ere the writer was consulted.

The possibilities of such an injury having been the cause of the ocular paralysis had never before been suggested, but that it had been was proven by the improvement which immediately ensued after surgical relief of the condition.



OBJECTIVE APPEARANCE.—Erect carriage, head thrown far back. Forehead deeply wrinkled. Right lid heavy and overhanging the upper half of the cornea; left likewise, but curtained nearly the entire face of eyeball leaving but a narrow palpebral fissure insufficient for visual needs. The pupils were dilated about two-thirds, but responded to light and attempted efforts of accommodation and convergence.

The eyeballs were prominent and looked staringly, but the right eye was the more protuberant and more fixed in its gaze.

The movements of the eyes were greatly impaired, but without actual abolishment of function in any one set of muscles; to a very limited degree rotation and the ductive powers were retained, but unequally in the two eyes.

SUBJECTIVE TEST OF VISION.—O. D.  $^{15}/_{20}$ ; with + 1. s. =  $^{15}/_{10}$ . O. S.  $^{15}/_{40}$ ; with + 1. s. =  $^{15}/_{10}$ .

OPHTHALMOSCOPIC EXAMINATION revealed well developed papilloretinitis in both eyes.

THE NARES were hypertrophic throughout and occluded the drainage of the accessory cells and sinuses, and the septum showed an old line of fracture extending through the lower third of the triangular cartilage and vomer. In the vomer the line of fracture radiated toward the sphenoidal sinuses. The deflection was to the left, with a large septal spur in contact with the inferior turbinated body.

Primary trial treatment consisted in depletion of nasal tissues and instillation of 2 per cent. dionin solution in the conjunctival sacs, and galvanism applied by means of sponge electrodes, the positive pole placed in the auriculo-maxillary fossa, and the negative over the closed lid of same side. Following this treatment slightly increased muscular action in all directions and appreciable elevation of the lids was obtained, and the fundi were found to be less congested and the vision subjectively clearer.

These immediate, but transitory, benefits warranted a prognosis that further progress would be stayed, vision improved and a fair degree of muscular functional power restored.

The treatment instituted was directed chiefly to the nose for the relief of the hypertrophic condition preliminary to later surgical correction of the septal deflection and partial turbinectomies of the middle turbinated bodies for the purpose of affording drainage to the accessory cells, especially the sphenoidal.



These measures were followed by progressive improvement of all symptoms.

At the present writing vision is  $^{16}/_{10}$  in each eye with the correcting glass, and the fundi have resumed their normal state.

The action of all muscles is greatly improved, binocular fusion at the near point is established and only moderate occasional diplopia in viewing distant objects obtains.

In submitting this report I do so with the idea of emphasizing the possible relation of the nose in causing ocular palsies, but at the present time I do not declare the case cured, for there still remains partial functional loss of all muscles.

The accompanying photographs show the patient at various periods. Those taken during the progressive stage show nicely the corrugated brow and the tilting of the head backward so as to permit vision through the narrowed palpebral fissures. The other pictures show the patient as in health some time previous to the accident, and also as he appears at the present period.

Furthermore, I wish to state that at no time was there any need for, nor use made of, either strychnine or the iodides, but in gelsemium 3x I found a remedy of merit, and considerable of the benefit thus far attained is undoubtedly the result of its virtues in promoting absorption and its stimulating action upon the nerves.

December 2. 1905. The patient is not yet fully cured; but the improvement, which is progressive and constant, is sufficient to make such a preliminary report worth while, and to emphasize the part the nose may play in causing ophthalmoplegia.

223 State Street.

In Attempting forcibly to remove a foreign body, especially a cockleburr, from the larynx intense reflex laryngeal spasm may be excited thereby against the sharp spines of the cockleburr. After the larynx is anæsthetized with cocain the patient is instructed to say "ah," the laryngeal mirror, and the Fauvel forceps having been introduced previously. The cockleburr is seized firmly just as the patient phonates, and is held immovably until the patient grows desperate for air, when she is ordered to breathe. The larynx relaxes into the position of forced inspiration, and as it does so a slight wigwag motion of the forceps will instantly bring away the cockleburr without the loss of a single one of its spines and without wounding the laryngeal tissues.

Atropin and Homatropin as Cycloplegics, Relative Actions of. Oscar Wilkinson concludes that homatropin is not in any way as efficient a cycloplegic as atropin. The solution of I grain to the drachm, I drop in each eye every three to five minutes until eight to ten instillations are made, seems to be as efficient and safe a solution as any. Homatropin usually, if not always, is inefficient in cases that suffer a great deal from eye-strain, whether there be any indication of retinal or choroidal congestion or not.

It is advisable to inform the patient that the examination may be only tentative, and they may have to return for further treatment under atropin. The use of homatropin is especially indicated in cases that do not suffer severely, and have no time to lose from their work.

Homatropin is not efficient in children. Atropin is the most desirable cycloplegic to use with children, and should be employed in most cases. It is by giving accurate corrections in these cases that intraocular diseases can be prevented that might incapacitate the patient for life.

Homatropin has an unrivaled field in elderly subjects for dilating the pupils for more perfect fundus examination. It is also to be commended in troublesome cases near or above the age of 40 in which a long cycloplegic action is not desirable, to enable one to detect slight degrees of astigmia by means of retinoscopy.

# THE LOCAL USE OF CARBOLIC ACID IN PHLYCTENULAR CONJUNCTIVITIS AND KERATITIS.\*

LOUIS D. HYDE. M. D.,

## Owego, N. Y.

I may be that this paper is merely a threshing of old straws, in which case the excuse offered is that in the text-books and journals to which I have access I have never seen anything about the local use of carbolic acid in the treatment of phlyctenular conjunctivitis and keratitis.

These conditions are easily recognized, the symptoms being irritation of the eye as if sand or sticks were in it, more or less pain, photophobia and lachrymation. The characteristic feature, however, is the presence of the little nodules situated usually at the limbus with the triangular mesh of blood vessels running to each, the apex being the site of the phlyctenule. In passing it may be mentioned that some authorities, like Fuchs, object to this latter term, as the nodule is in no sense a blister, but simply a collection of cells heaped up and of low vitality, often breaking down and forming the ulcers that follow. These nodules are not necessarily limited to the limbus, but may be situated anywhere in the bulbar conjunctiva and at times on the cornea, in which latter case we have a phlyctenular keratitis. If the nodules are numerous the marked triangulation of the blood vessels is lost and there is a more uniform redness. Each little raised point lasts from eight to fourteen days, but the whole attack may be prolonged for weeks, as new ones frequently form before the old ones have entirely disappeared.

The inference to be gathered from the text-books is that this particular kind of inflammation is for the most part a local manifestation of constitutional trouble, and this impression is strengthened by the synonyms conjunctivitis (and keratitis) eczematosa and conjunctivitis scrofulosa. Furthermore, there are frequently found as accompaniments eczema of the lids, eczematous patches behind the ears

<sup>\*</sup>Read before the New York State Homocopathic Medical Society.

and elsewhere, and the scrofulous diathesis is often evidenced by swollen glands and the other well known ear-marks. Great stress is therefore laid, and properly, too, on the constitutional treatment, local means being limited to the use of cleansing solutions, one per cent. yellow oxide of mercury ointment and calomel, which latter is to be dusted on when the phlyctenules break down and ulcers form, provided the patient is not taking iodides.

In 1902, while resident at the New York Ophthalmic Hospital, there was an obstinate case of phlyctenular conjunctivitis in one of the wards. It occurred to me that perhaps by cauterizing the nodules with carbolic acid it would not be necessary to wait for them to ulcerate, and we could so hasten resolution. Obtaining permission of the attending surgeon, to whom the case had been assigned. I anæsthetized the eye by three instillations of a 4 per cent. cocain solution at intervals of three to four minutes and then touched the phlyctenules with cotton dipped in carbolic acid, C. P., the excess of acid having been squeezed out. The immediate effect was a blanching of the nodules, then followed a slight reaction, which was easily controlled by the application of ice pads, and in two or three days the phlyctenules had disappeared and no new ones developed.

Since that time I have used this treatment in all cases of phlyctenular conjunctivitis and keratitis and with uniformly good results. Instead of waiting a week or longer for the phlyctenules to run their course, the patient was rid of them in from one to three days, and in almost every instance no new ones formed. Whether the case would have developed new nodules or not is an open question, but the number of cases treated would rather dispose of the possibility of mere coincidence.

If, as Pusey says, the specific micro-organism (and he as well as Fuchs names the staphylococcus) is responsible, then the carbolic acid acts antiseptically, and so might stop further invasion.

In closing, let me repeat that with this I never neglect the constitutional treatment and always give what seems to be the indicated homeopathic remedy.

## A CASE OF WEBBED UVULA AND TWO CASES OF REFLEX COUGH.\*

### HERBERT W. HOYT, M. D.,

## Rochester, N. Y.

HE first case I wish to report to-day is unlike anything I have seen, nor can I find a record, so far as I have searched, of a similar condition.

Miss L. S., age 25, found great difficulty in articulating clearly owing to a seeming fulness in the throat. Her throat tired easily when reading, and was frequently inflamed. On examination her palate extended to the middle of the pharynx, nearly to the level of the base of the tongue, and apparently was devoid of a uvula.

A closer examination, however, revealed a well developed uvula, from the sides of which a web-like membrane extended to the posterior

faucial pillars.

Under cocain anæsthesia I dissected two triangular pieces of this web, leaving a normal sized palate an da good uvula. The hæmorrhage was slight, the reaction moderate, and in five days the parts were quite normal.

The patient was delighted with the change, saying, even three days

after the operation, that she never talked so easily before.

Case 2.—Helen H., age 8. For two years this child coughed a deep, hollow cough, usually with very little expectoration. Although naturally a robust child, she had lost ten pounds in a few months, and seemed listless. On examination I found the lungs all right but basilar hypertrophied tonsils and a large mass of adenoids. Operation was advised and refused. The child was taken to the mountains, examined by a lung specialist, an operation for removal of adenoids performed there, but with no benefit. She was brought to me again six months later. I could not discover that the adenoids had been removed. The tonsils were then removed, and in two weeks the cough had disappeared.

CASE 3.—Blanche O., age 14. For years she had a dry, tickling throat cough, worse in cold weather and at night. The lungs showed no lesion. Various medications gave no relief. The only abnormal condition of any apparent significance was a fair sized lingual tonsil.

<sup>\*</sup>Read before the New York State Homocopathic Medical Society.

A thorough cauterization of this growth gave relief at once, and in

ten days the cough ceased.

Unfortunately, not all coughs are as readily relieved, but I feel contident if we would use all the means at our disposal for the careful examination of such cases, more recoveries could be credited to us.

33 Clinton Avenue, South.

True Hypertrophy within the nose must not be confounded with congestion or inflammation. Hypertrophic tissue and portions of the bone should be removed when symptoms and appearances indicate pressure, altered secretions, interference with drainage, and the normal functions of the nose. Escharotics should never be employed, and the galvanic cautery is of doubtful efficiency. A clean cut by means of specially devised scissors through both soft tissue and bone is by far the best method for operation. The snare offers the best method for the removal of posterior hypertrophies.

The resultant wound should be protected by a thin layer of gauze, moistened with a 12 per cent. solution of aceto-tartrate of aluminum, to which may be added a few drops of weak adrenalin solution.

Tinnitus aurium, present only in the recumbent posture, is suggestive of aneurism of one of the posterior cerebral vessels.—Am. J. of Surg.

Before operating for pharyngeal adenoids or hypertrophied tonsils make sure that these are not merely an expression of status lymphaticus. If they are, do not employ an anæsthetic. Also determine whether the patient is a hemaphiliac. If he is, do not operate at all.—Am. J. of Surg.

Individuals with bluish sclerotics, and with dark lanugo over the upper part of the back, are usually of tuberculosis diathesis; and these signs are not inconsequential in making a diagnosis.—Am. J. of Surg.

During Narcosis, when stertorous breathing calls for extension of the jaw, it is well to hold it forward first on one side, then on the other, alternating at short intervals. Long continued pressure at the angle or angles of the jaw produces much soreness. Often the jaw can be kept forward by catching the lower incisor teeth in front of the upper ones (if they are strong); a single finger on the chin is enough to maintain this position.—American Journal of Surgery.

## PRACTICAL HINTS.

### Conducted by

G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

dutta-Percha Tissue for Tympanic Perforations. Dr. D. G. Yates, writing in the Medical Record for November 11th, calls attention again to the aid that a splint may be in helping the reformation of the drum membrane in noninfected traumatic puncture cases, and in old perforations free from suppuration. He gives the technique as follows: Cut the patch about twice the size of the hole. Thoroughly sterilize In the case the canal and drum by syringing, mopping and drying. of old perforations touch the edges with strong nitrate of silver. Apply the patch with forceps and probe, and press down the edges carefully against the membrane. The patch should previously lay in alcohol. No air should pass through the perforation when patch is in proper position. Use Valsalva's method or a catheter to get evidence on this point. The rubber, if slightly warmed, will adapt itself to irregularities as when the perforation reaches to edge of canal. Finally, dust lightly with boric acid. To remove patch use a probe with a sharp tip at right angles to the shaft. The syringe or peroxide are also useful. After some ten to fourteen days the disk will no longer adhere to the membrane; the perforation is no longer air-tight, because there is a casting off of the superficial epithelium, or the patch has hardened. The perforation not yet having closed, remove the patch and apply another as before.

Ocular Symptoms of Gout. Dr. Wheelock, of Fort Wayne, Indiana, writes in the N. Y. Med. Jour., for November 11, 1905, on this interesting subject. He calls attention to the fact that gout, arthritis deformans, etc., attacks joints that are terminal and where circulation is the poorest, and points out the eye is practically a system of terminal blood supply. The sclera is not dissimilar in its protective character to the cartilage of a joint. The sluggish nature of certain eye inflammations he considers the most definite diagnostic element of a gouty cause. He accounts for the feeble iritic adhesions of gouty iritis by stating that the stroma of the tissue is in gouty inflammation only secondarily involved, while it is the primary seat in syphilis. quotes a case of a lady with a red and injected eye, and very little pain. photophobia or lachrymation, and no narrowing of the palpebral fissure. The inflammation was confined to the globe and margin of the cornea. His diagnosis was gout. Atropin demonstrated iritic adhesions. Under colchicum and eliminants the sight became dim, and the field narrow, tension became plus, and eserin was used locally. After three weeks a sclerotomy was made. A few days later she had an attack of typical gout of the great toe joint. Subsequently the eye became normal and

vision practically perfect. Another case was in the person of a physician who resented the diagnosis of gout when applied to his red and painful eye, but who came down shortly after with a gouty toe. The third case was one of acute glaucoma coming on in a man who had had previous attacks of gout and arthritis, and the fourth was of simple glaucoma in a similar individual.

Deaf-Mutism From Ptomain Poisoning. Dr. W. S. Bryant, of New York, reports in the Medical Record, for August 19, 1905, a case of ptomain poisoning in a child from eating cheap ice cream. The family, history and the hospital records of the case are very clear. The treatment while in the hospital was with spirits of turpentine. Four days later she returned home, where, a week later, it was discovered that she was totally deaf. She also had vertigo, difficulty of locomotion, difficulty in swallowing, facial twitchings and pain in her head. weeks later when the doctor saw her this condition continued, she was deaf, could make only inarticulate sounds in trying to talk, was fretful and suspicious. There was no muscular atrophy. The ears gave no special information. Two years' of treatment was without result.

Astigmia as a Cause of Vomiting of School Children. Dr. Aaron Brav, of Philadelphia, reports in detail in the N. Y. Med. Jour., of August 26, 1905, a number of cases of young school children who for a considerable period of time had had attacks of vomiting during school hours, relieved by removal from school and rest, but returning promptly with the return to work.

After proper examination and the wearing of glasses for astigmiathese children, in several months of watching, had no further attacks. He says: "In the absence of kidney conditions, in the absence of gastric pain, of fever, chills, epigastric fullness, all cases of vomiting in school children preceded by vertigo, headaches, and visual disturbances are in nearly every instance due to astigmia.

Acute Rhinitis. Allium cepa.—Excoriating nasal discharge, while that from the eyes is bland. Constant sneezing. Symptoms aggravated when coming in a warm room.

Arsenicum iodatum.—Watery, irritating, excoriating discharge from the anterior and posterior nares, frequent sneezing, which comes on in paroxysms. Worse in the open air. Hyperæsthetic rhinitis

Camphor.—Dull, pressive headache; fluent, watery discharge from the nose. Pain over and back of the eyes. The eyes watery and sensitive to light; paroxysm of sneezing. Involvement of the frontal sinuses.

Gelsemium.—Fullness at root of nose with irritation of the nasal passages producing constant sneezing, with discharge of mucus; redness and soreness of the nostrils and nasal chambers. Chills running up the back with cold hands and feet. Dull aching over the body, especially pronounced in the muscles of the limbs and in the joints. Weakness of the lower limbs after slight exercise.

## PRESIDENTIAL LETTER.

AMERICAN HOMŒOPATHIC OPHTHALMOLOGICAL, OTOLOGICAL AND LARYNGOLOGICAL SOCIETY.

## Fellow Members:

According to the traditions of this society you will naturally expect to have me say something officially at about this time; and, indeed, I am more than glad to have the opportunity to say a word or two.

The annual meeting for 1906 will be held at Atlantic City, N. J., during either the first or second week in September, the precise date to be determined after consultation with the executive committee of the American Institute of Homœopathy. This detail will be taken up in order, and the results communicated to you in due season.

Your attention is called to the fact that the coming meeting will be of unusual importance, as we will meet in connection with the International Homocopathic Congress and the American Institute of Homocopathy, and no effort on our part should be spared to make our meeting and program worthy of the occasion.

The committee of arrangements has planned it so that our sessions can be freely attended by the visitors from abroad, and that all papers by the visitors, relating to the special subjects of our society, will be read and discussed at our sessions, thereby bringing us in close touch with our guests.

It seems to me to be unnecessary that I should have to urge authors to make a prominent feature in their papers, whenever it is possible, of the value of the homœopathic remedy in the cure and relief of their cases, but I am confident that this ought to be borne in mind, for the old school are more now than ever declaring publicly that the difference in the schools, that they admit formerly existed, has passed away, using it as an argument to do away with sectarianism. We all know that this is false, and I feel sure that the majority of those who read this habitually use remedies prescribed on homœopathic lines and find that it assists the work they are doing. Where this can be plainly told, it will give credit to our school of medicine and to you individually, and should not be withheld. Last year we had an hour devoted to "failures," which was in favor, and the year before we had

one equally popular devoted to verifications; both might be well repeated this year.

The clinical feature of our meetings has much to commend it; we shall endeavor to arrange if possible for an afternoon that will be both pleasant and profitable, and at such time as not to interfere with regular sessions that some may desire to attend.

Atlantic City does not need any advertising at our hands, as its hospitality is widely known and its hotels are both capacious and accommodating. They will shelter any number of guests, and offer rates that will meet all demands. We will, however, select one of the best of them for our headquarters, and as we will all want to be together as much as possible, it will be well if we locate ourselves there, as nearly as possible, and make it our home for the time.

You are aware that a successful meeting depends upon the cooperation of all. Papers and discussions must come from you. This, of course, means a demand on your valuable time, and may be a task, but remember that there is some topic that you are personally interested in, and that it will do you good to write on, and also that a paper once begun is half finished, so I beg that you will at once choose the title and get it finished so that plenty of time may be had to get the discussions. You, who are old in experience, we all want to hear from; you who are young, we all want to become acquainted with, and an interchange of thought will do us all good.

With best wishes for a prosperous and happy new year, I am, Faithfully yours,

JOHN B. GARRISON.

115 E. 71st Street, New York.

## BOOK REVIEWS.

THE MEDICAL DIRECTORY OF NEW YORK, NEW JERSEY AND CONNECTICUT. Published by the New York State Medical Association. 24 Madison avenue, New York. Vol. VII. 1905. Chairman of Committee on Publication, Charles Ellery Denison, M. D.

This handy volume of 848 pages is remarkably free from errors. Upon cursorily looking through it we note the omission of but one name and of one institution, the New York Ophthalmic Hospital and its Dispensary; these might possibly be due to failure to respond in time with the requested data. No wrong addresses and comparatively few typographical errors of initials were noticed; among these this Journal is listed as "Editor A. H. Palmer, M. D." In the Ho-

moeopathic Board of State Medical Examiners John L. Moffat's term should have been given as expiring in 1908, and his chair as physiology and hygiene; Dr. Garrison in reality has materia medica and practice. The State Board of Health is slurred; Dr. Eugene H. Porter, of New York, is the Commissioner, and Dr. H. D. Schenck, of Brooklyn. Consulting Ophthalmologist.

"Every effort has been made to make a correct and complete list of

all legally registered physicians."

In New York state there are 11,923; New Jersey, 2,253, and in Connectitut, 1,296. Of the 7,553 in Greater New York, 5,552 are credited to Manhattan and Bronx, 1,509 to Brooklyn, 130 to Queens, and 62 to Richmond.

This book should be on the shelves of every doctor's library; it is well arranged, printed and indexed.

ENGLISH SYNONYMS AND ANTONYMS, WITH NOTES ON THE CORRECT USE OF PREPOSITIONS. By JAMES C. FERNALD, editor of synonyms, antonyms and prepositions in the Standard Dictionary. Fourteenth Edition. 574 pages. Funk & Wagnalls Co., New York and London.

Connectives of English Speech: The Correct Usage of Prepositions, Conjunctions, Relative Pronouns and Adverbs Explained and Illustrated. By James C. Fernald, editor of the Student's Standard Dictionary, English Synonyms and Antonyms, etc. 324 pages. Funk & Wagnalls Co., New York and London, 1904. Price of each, \$1.50, net.

"The wrong use or the omission of connective words is often the occasion of looseness of style." Coleridge said that a master of our language may be known by his skillful use of connectives. The secand, particularly, of these books should be in every one's library; in clearness of distinction and richness of illustration it is not only interesting reading but handy for ready reference. Our only regret is that it cannot include all the words we seek, although the index is voluminous.

The English language is peculiarly rich in synonyms. To write or speak to the best purposes one should know in the first place all the words from which he may choose, and then the exact reason why in any case a particular word should be chosen. Special instruction in the use of synonyms is necessary because few students possess the analytical power and habit of mind requisite to hold a succession of separate definitions in thought at once, compare them with each other and determine just where and how they part company; the persons least able to do this are the very ones most in need of these books. Copiousness and clearness of language tend directly to affluence and precision of thought. The misuse of prepositions is one of the most common of errors and one of the most difficult to avoid, while their right use gives to style cohesion, firmness and compactness, and is an important aid to perspicuity. One of the marks of culture, of education, is the use a person makes of words in speech and writing.

THE A, B--Z OF OUR OWN NUTRITION. BY HORACE FLETCHER. author of "Monticulture," "Happiness," "That Lost Waif," "Glutton or Epicure," etc., etc. Experimentally assisted by Dr. Ernest Van Someren, M. R. C. S., L. R. C. P., of Venice, Italy, and Dr. Hubert Higgins, M. A., M. R. C. S., L. R. C. P., of Cambridge, England. 12mo, 426 pages. Published by Frederick A. Stokes Company,

New York City.

After a short pleasingly written introduction, in some places even amusingly put, for the sake of being the better impressed upon the minds of the laity, for which the book is especially written, the author has collected several scientific articles from the pens of Drs. Ernest Van Someren, Sir Michael Foster, K. C. B., M. P., F. R. S.; Prof. Russell H. Chittendon, of Yale; Harry Campbell, M. D., F. R. C. P.; Prof. J. P. Pawlow, of St. Petersburg, and Dr. W. B. Cannon, of Harvard, on such subjects as proper mastication and salivation of food stuffs, digestive movements of the stomach and intestines as shown by the Roentgen rays, etc.

The book is not only quite instructive to the profession, but is one the physician can have his patients read to impress upon them the necessity of proper eating and drinking in order to get the most usefulnes and pleasure out of life; while at the same time, in explaining in a readable style the intricacies of the human organism, it tends to show the patient the superior knowledge which the physician needs and possesses in order to comprehend these intricacies sufficiently to

cure the human organism when diseased.

Superstition in Medicine. By Prof. Dr. Hugo Magnus. thorized translation from the German, edited by Dr. Julius L. Salinger, Late Assistant Professor of Clinical Medicine, Jefferson Medical College, Physician to the Philadelphia General Hospital, etc. Funk & Wagnalls Company, New York and London, 1905.

This is a very entertainingly written little book of about 200 pages, not exactly giving the development of either medicine or theology, the history of which is intimately related, but rather giving the belief of the people from some seven centuries B. C. down to about a couple

of centuries ago.

Here we find specialism is of reverent age, for in the B. C.'s the Egyptians believed the cat-headed goddess Bubastis blessed mothers with fertility (obstetrician), and Isis gave especial attention to diseases of digestion (now we should say metabolism), and among the Greek gods and goddesses Athene was the specialist in ophthalmology, and on account of her curative successes won among other ornamental epithets that of "ophthalmitis."

And from the Jewish sects, the Essenians or Essenes and Therapeutæ probably the Christian Scientists have evolved, as they believed

the art of healing came from the Sacred Scriptures.

A good book for the waiting room table.





## The Homeopathic

## Eye, Ear and Throat Journal.

Vol. XIL

Lancaster, Pa., and New York, February, 1906.

No. 2.

## EDITORIAL.

### MEDICAL POLITICIANS.

VERY one knows the class of men that has made this term unsavory, yet a moment's consideration will show the necessity for proper activity—which is not self-seeking—on the part of each of us in behalf of our school and the welfare of the community.

On another page will be found a resolution which is published upon request of the New York County Society. This is an instance of ill advised political activity; its only effect will be toward weakening the influence of that society and of our school in general because it will prove ineffectual.

The Washington investigations as to the possible deleterious effects of food preservatives are being carried out upon a definite system and with a single object by bureaucrats of whom it is useless to expect compliance with this request, and whose "provings"—even if they could be induced to make them—might not command our confidence. We already have provings of these substances, to which we may add the symptoms developed in these experiments.

The request to administer, as part of their investigation, "a homoeopathic preparation to several [why not to all?] of their provers" destroys any possible chance of this resolution receiving any consideration, although its fate would probably have been the same even if worded to ask simply that the modalities and subjective symptoms be noted because of their value in differentiating the actions of similar drugs—as shown by our experience of the past hundred years.

As citizens, as well as in our capacities as physicians and homoeopaths, each of us should exert whatever influence we can to prevent the enactment of injurious legislation—such as the optometry, osteopathic, and single examining board bills—and by furthering measures in the interest of the public health—such as proper seats, desks, lighting and ventilation in school rooms, etc.

But as a school of practice our strength is most effective through organization; it is one's duty not only to join but to be active in our homoeopathic societies, to be good politicians both within and outside of them. The office should seek the man, it is usually safe to oppose, upon that ground alone, him who seeks office.

#### A SYMPOSIUM.

S Dr. Strong says, in discussing Dr. Hays's paper, "the term malignant myopia appears to be rather an elastic one."

We solicit from our readers their views as to the cases to which the term "malignant" should be employed in contra-distinction from "progressive." Too many confuse these conditions or carelessly speak of any progressive myopia as malignant; it is shrewdly suggestive that such have never been called upon to combat a really malignant case.

Such a symposium should prove of value and interest; it will appear as soon as a sufficient number of responses are received.

## CORRECTION.

In the biographical sketch of President Garrison on Page 4. Dr. George W. MacDowell was named as one of the founders of the JOURNAL; as a matter of fact he became one of the editors at the commencement of its second year.

## THE RELATION OF THE OPTICIAN TO THE OCULIST.

#### FRED. D. LEWIS, M. D.,

### Buffalo, N. Y.

I may seem somewhat presumptuous to occupy the time of a society of this nature with the consideration of the relationship of the optician to the oculist, but in the face of recent attempts to pass legislative measures in the state of New York I think that we, as oculists, have a duty.

At the last session of the New York State Legislature, and also at the session of a year previous, a bill was introduced, entitled the Optometry Bill, the purport of which was to legally authorize opticians to examine the eyes for, as well as to make, necessary glasses. With your permission I would like briefly to summarize the general considerations of this bill.

Section first describes the practice of optometry to be the employment of any means other than drugs to measure the power of vision and the adaptation of lenses for the aid thereof.

Section second provides for the appointment of an examining state board similar to the State Board of Medical Examiners. Section third designates the powers of the proposed board of examiners, and section fourth, the persons required to pass such an examination and those that are to be exempted.

Section fifth the procedures necessary, such as registration with county clerk, etc., for the successful candidate to follow to become a legalized optometrist.

Section sixth sets forth the charges to be paid by the applicant for examination and certificate and registration with county clerk.

Section seventh prohibits any one not legally authorized to practice optometry in the state, and section eighth the penalty for its violation.

Dr. George M. Gould, of Philadelphia, Pa., in an editorial published in *American Medicine*, April 8, 1905, comments on the fact that opticians all over the United States, and, indeed, all over the world, are establishing periodicals and schools in their endeavors to secure licenses

from legislatures to practice ophthalmology without a medical education or license. He refers to their humorous contention that errors of refraction and muscle imbalance have no relation to diseases of the eye, and to them should be left the practice of testing and prescribing as well as making of glasses. He savs, as well might the maker of trusses pose as a surgeon whose specialty is hernia, or a maker of pessaries and forceps call himself a gynæcologist.

I need not dwell on these remarks of Dr. Gould, for we, as specialists, fully appreciate how intimate are the relations of defective eyes to the treatment and cure of disease.

I am tempted here to quote from an optical trade journal the following by Louis Kahn, which appeared in the Shur-on Chronicle. says: "The natural successor to the old style optician whose custom depended on the honesty of his purpose and his commercial integrity is the dispensing optician, who to be successful, must have a definite business policy, of which the best and most enduring is that of honesty and integrity in his dealings with his customers. He has had to follow the advanced educational path or retire from the field, for the optician who now fills the oculists' prescriptions stands in the same relation to him as the druggist to the physician, save that the optician has a great many more responsibilities and functions. He must be educated to fully understand all the requirements for filling prescriptions, have scientific ability for testing and grinding with accuracy all complicated lenses, a commercial knowledge of materials and merchandise, salesmanship for the proper exploitation to his customers, the mechanical ability to properly fit and adjust spectacles and eye-glasses to their features."

This in my opinion properly defines the relationship that should exist between the optician and the oculist. The optician should no more be allowed to prescribe glasses than the druggist to prescribe medicine. To be sure, opticians do test for, as well as make glasses, and the druggist does sell drugs to those inquiring for them. even without a physician's prescription. But is it not time now that those in whose ability the care of the eyes and the health of the public is placed should protest against such abuses? The people at large are not to blame, for they are ignorant of the mischief they may be doing themselves in their attempts to save the charges of the oculist or physician. They know their parents practically fitted themselves to glasses when their sight failed them, and purchased at the general store croup,

cough or fever compounds when ill, and they see no reason why they should not do the same.

At a meeting of specialists some time ago I was requested to present a paper, and I chose for my subject "The Advertising Specialist." I wrote to various advertisers claiming to cure diseases of the eyes and ears at home through the mails, claiming to have the patients fit their own glasses, and others offering preparations to use to allow patients to discard glasses. The claims were contradictory, and undoubtedly some, if not all, were using the United States mails for fraudulent purposes. My paper was listened to with attention, and that ended it. The various members had their time occupied with the calls of their patients, and although they agreed with me, they left the public to learn the nature of these advertised claims at their own expense.

Now it seems to me that it has become a duty to each and every one of us to institute a campaign of education for the general public as well as for the general practitioner.

I not infrequently have patients come to me who have worn glasses without relief, and who tell me that their doctor, being unsuccessful in giving them comfort, advised them to go to an optician and get some glasses. Of course the glasses were not suitable, and the physician might as sensibly have told them to go to the pharmacy and get some medicine. With such ignorance, even in exceptional cases, on the part of the family doctor, it is not at all surprising that the public should know no more. We but too frequently find cases supplied by the optician with glasses that are so far from the correction that their eyes demand that we wonder how any sane man could have ordered them. I had a woman come to me a few days ago wearing a + I spherical, fitted by an optician, which relieved her headache by fogging her vision, while the glasses she required were a minus sphere on a minus cylinder, which gave her perfect vision as well as comfort.

The opticians have secured legislation permitting them to examine eyes in the states of Minnesota, California and North Dakota. I firmly believe in alvanced education, and think that anything to better the services of any of the professions or trades is to be encouraged. I should say by all means have a license for opticians, and compel those furnishing glasses to be competent to do the work well. but let their work be confined to that of the optician and do not permit them to practice ophthalmology, which is only a branch of medicine, without a diploma from a recognized medical college.

I would even go further and make it a punishable offense if they are discovered attempting to do refractive work. And, if the same law could be made to hold in regard to the druggist, who dispenses patent nostrums, an incalculable blessing would have been conferred on suffering humanity.

Now, as a last word, I only wish to urge that this subject be not laid aside in our minds, but that each on his return to his field of labor, endeavor to impress on his brother physicians the dangerous legislation that is threatening in most of the states, and is a fact in others, and see if we cannot rather restrict the optician than to grant him privileges to which he is not by education entitled. The optician is a business and not a professional man.

No. 188 Franklin Street.

#### DISCUSSION.

M. A. BARNDT: I fully agree with the doctor in everything that he has said.

We know that the better class of opticians are anxious to raise the standard of their profession, and to get rid of the undesirable elements that have come into their ranks, but under the existing condition every Tom, Dick and Harry that can place lenses before eyes can sell and fit glasses and fleece the unsuspecting public. With suitable laws regulating the practice of optometry a higher standard will be required, better education, strict examinations and registration will certainly do very much in accomplishing the desired results.

In my opinion one of the most detrimental obstacles that the optician has to contend with is the optical school, where any man or person may enter for a day, week, or month, and for the consideration of a certain fee will come away equipped with a certificate giving him the full privilege of fitting glasses, and in many cases of putting the title Dr. or Prof. before his name. With suitable laws regulating this practice, these schools will be obliged to raise their standards of education along this line and be better prepared to teach the optician all the requirements for filling oculists' prescriptions, to have a scientific knowledge for grinding accurately all complicated lenses, mechanical ability to properly fit and adjust spectacles and eye-glases to the features, a knowledge of materials and merchandise used; these combined with a liberal education and good business ability, will certainly do much towards putting the optician in his proper sphere and eliminating the undesirable men engaged in this work.

In the state of Wisconsin during the past year the opticians have had an optometry bill before the legislature very similar to the one outlined in Dr. Lewis's paper; it passed the lower house with a good majority, but was defeated in the upper house. I firmly believe with Dr. Lewis that advanced education, granting of licenses, or anything that will better the condition of the opticians is to be encouraged, while I do not believe they are the proper men to do refractive work or to practice ophthalmology, but that they should stand in the same rela-

tion to the oculist as the druggist does to the physician.

We often find careful and conscientious men among the opticians that do very good work, equaling and often superior to the men that write M. D. after their name. This can be accounted for in many instances to carelessness or inferior preparation. We all know that many physicians go out from a medical college as oculists with no more training or experience than is given in the ordinary course of a medical education, or some physician may think that a little post-graduate work will make him an oculist. Now, at the present time, with the great improvements that are being made in the appliances for the purpose of examining the eyes and determining the refractive errors, both manifest and latent, the unskilled oculist will have to look well to his laurels or the enterprising optician with the modern appliances will outstrip him.

Thus we, as physicians and oculists, have important duties to per-

form along this line.

1st. To teach the public that there is a difference between the oculist and the optician. This duty lies largely with the general practitioner, and he should be sufficiently well informed to give his patients the advice they desire, and not allow the prevailing opinion to continue that any one can fit glasses, or to send his patients to an optician, or simply with the advice to "go and get a pair of glasses."

2d. That we, as oculists, should stand in such close relationship to the general practitioner that he will regard us as his friend and assistant, and the cases that he may refer to us will be treated for his benefit, and that no reflection shall be made upon his work so that in the future the patient will return to him with the utmost confidence in

his ability.

3d. We should also have the confidence of the opticians so that they may refer their cases to us for treatment, diagnosis and examination; when we have completed our work we must be particular to send the patient back with the prescription so that the same optician may fill it. By thus being in closer touch with these men, the more patients they refer to us, if our work proves satisfactory, the future work of those patients will be ours.

I believe that by having the full confidence of these men aiding them in their work when practicable, they striving to raise the standard of their profession in various ways, we will accomplish much in

breaking down the barrier that now exists.

E. HUMPHRIES: The optician has no right to practice ophthalmology without a medical diploma. The optician has no right to practice ophthalmology, nor has the ophthalmologist any right to intrude on the

optician's sphere. Both should be educated men in their respective branches; it should be live and let live. The duty of an oculist is to cure disease or symptoms of disease of the eye with medicine or glasses. The duty of the optician is to be educated in the mechanical side, grinding and accurately filling the oculist's prescriptions.

Dr. Lewis says in his paper, "Educate the general practitioner and the public." I especially blame the general practitioner who sends his eye cases that need glasses to the prescribing optician to save the expenses of a reputable oculist. This encourages them to such an extent that they apply for special legislation.

Let an oculist send his making and fitting of glasses to an optician

but not to a prescribing one, if it can be avoided.

There should be the greatest confidence and good feeling between oculist and optician, as one is just as essential as the other, and each

has his own sphere.

E. W. Beebe: I think the opticians are likely to be the people who will do the refracting of the future. They certainly will have the ability as well as the inclination to do that kind of work, and have but the one object in view, and that is to succeed. I think that we, as oculists, should pay more attention to the optical branch of the work, as it is evident that a large proportion of the diseased conditions of the visual organs are due to a lack of accurately fitting lenses. As there seems to be a lack of facilities for thorough teaching of this subject in our medical colleges, I would be pleased to see an optical institute established by the profession of our school, where practitioners could perfect themselves in this very important auxiliary to the oculist's profession.

W. B. Kreider: I have had some experience with these eye quacks. At the present time there is no law in the state of Indiana that will prevent them from doing anything that they want to do in the line of advertising. They claim to cure piles, diseases of the womb and of the stomach through the eye. There is no law to prevent them from using the title doctor, and in the eyes of the people they are just as much doctors as any full-fledged practitioner in the state. They will probably be curbed in time, but meanwhile they have full swing.

HERBERT D. SCHENCK: This matter has been actively agitated in New York state for the last three or four years, the question coming before successive legislatures. Men who styled themselves optometrists or refractionists have organized and have demanded that their society be given the power of examination of candidates who wish to prescribe glasses. They want the exclusive right to prescribe glasses, making the specious claim that they are after the peddling opticians and quacks. The opticians who only put up oculists prescriptions and the medical profession have unitedly opposed these quacks who want the seal of the state behind them for financial reasons and not to protect the "dear public" as they profess. These so-called optometrists

not only fit glasses but also claim to cure all sorts of eye conditions, making the most startling claims as to what they can do. No one can tell yet how the matter will be settled, as their false claims make an impression on the legislatures annually, and they are very persistent in their agitation. They are so antagonistic to oculists that their defeat in this endeavor to get the seal of the state behind them is one of the most important matters in the protection of the public, and the advancement of our science in the esteem of the general laity.

"Talk health. The dreary, never-ending tale
Of mortal maladies is worn and stale.
You cannot charm, nor interest, nor please,
By harping on that minor chord, disease.
Say you are well, or all is well with you,
And God shall hear your words and make them true."

## CERVICAL SYMPATHECTOMY FOR GLAUCOMA.

Indications for and Technique of the Operation, With Results From the Surgical Standpoint.

EDWARD R. GREGG, M. D.,

## Pittsburg, Penna.

N a paper read before the Surgical and Gynæcological Association last year the writer reviewed somewhat extensively the literature on this subject, and it will, therefore, be necessary in the present paper to refer at times to the previous one.

To the ophthalmologist interest in the operation lies in its application to cases of glaucoma and possibly of optic atrophy, Graves's disease and ophthalmic migraine. However, as we are limited in this paper to its use in glaucoma, and as it is more often practiced for this disease, we will rest with the mere mention of the other three diseases.

Regarding its indications in glaucoma the writer can say but little, as he is not an ophthalmologist. However, perhaps the following quotation from the previous article referred to will explain his position: "While the surgeon will have to be governed by the advice of the ophthalmologist in regard to the operation of sympathectomy in cases of glaucoma, it would appear from the results of Jennesco's cases, and those of others, that the operation is justifiable, has a legitimate standing, and should be advised in certain cases of glaucoma.

"The testimony of various operators appears to show that resection of the superior ganglion of the cervical sympathetic is a rational procedure in progressive glaucoma (except the acute form). Before vision is completely destroyed the sooner it is done after a fair trial of other treatments, the better should be the results."

In glaucoma it is only necessary to remove the superior ganglion of the sympathetic on the affected side, according to the advice of the ophthalmologist. "The removal of this ganglion causes contraction of the iris, relaxation of the circumbulbar muscle, vascular dilation, lower intraocular tension and a decrease in the elements constituting

the aqueous. The lessening of ocular tension is explained by the ablation of the ocular fibers of the sympathetic, which traverse the ganglion before reaching the eye. These fibers are distributed to the iris, the uveal tract, the vessels of the eye, and the peribulbar muscular apparatus contained in the capsule of Tenon. Their excitation, permanent or intermittent, peripheral or central, produces a collection of phenomena which is termed glaucoma."

Jennesco believes glaucoma to be central and not peripheral in origin, and in suppressing the superior ganglion the origin of the trouble is not removed, but the ways of transmission are destroyed. He is of the opinion that this operation should be especially successful in its results in chronic irritative glaucoma and in simple chronic glaucoma. He collected reports of thirty-five sympathectomies for glaucoma with marked improvement in all but five cases. From these cases he concluded that the immediate, as well as the ultimate, results of this operation are very satisfactory, but that complete restoration of vision in such cases cannot be expected without re-creation; that we have reason to expect improvement and relief from pain in these cases, however, and to feel that even the maintenance of the limited amount of vision that existed at the moment of operation is of the greatest advantage.

Regarding the operation itself, it may be proper to say that the following technique has been worked out from our own cases, from literature and from communication with one who has performed the operation, we not having had the good fortune to witness the operation by other hands.

The usual aseptic preparation is made, a general anæsthetic given and a sterile rubber cap placed over the head to confine the hair.

The sterno-cleido-mastoid muscle is put on the stretch by raising the shoulders and lowering and turning the head to the opposite side. It is an advantage to have the head steadied by an assistant, beside the anæsthetist, during the entire operation, as a change of position, by disturbing the relations of the parts, may make the dissection more difficult if it does not acutally lead the operator astray. The incision is then carried from the mastoid to the clavicle, directly over the central axis of the sterno-cleido-mastoid muscle, dividing skin, superficial fascia and platysma. The external jugular vein, diagonally crossing the line of incision, is divided between two ligatures. The superficial

cervical nerve which crosses the incision more at a right angle may be cut if necessary, and later united with a suture.

The sterno-cleido muscle is now split throughout its entire length (even though only the superior ganglion is to be removed) and thickness down to the deep cervical fascia beneath. The full length incision is considered important as it does no harm, and a little later greatly facilitates the finding of the nerve, which, in one's first operations, is not always easy, and through a small incision may be exceedingly difficult. Failure to observe this point was perhaps the indirect cause of one death following this operation, due to bruising or injuring the pneumogastric and phrenic nerves while groping around for the sympathetic in a wound that was not long enough to allow easy access to the nerve sought.

Some authors advise incision at the posterior border of the sterno-cleido-mastoid, drawing it forward and going behind it; but the splitting of it brings one more directly to the nerve and obviates excessive retraction, thus minimizing the danger of injuring the other delicate structures in the neighborhood. Blunt splitting of the muscle has the advantage over cutting, in that there is no chance to puncture inadvertently, at this time, the carotid sheath or its contents.

The deep cervical fascia, under which lies the nerve, is now in view in the depth of the wound. It is well now, with the handle of the scalpel, to partly free the two split halves of the muscle from this fascia, so that wider working space can be secured by retracting. Up to this point of the operation only ordinary prudence is required.

The dark jugular vein will be noticed showing through the fascia. It often appears as a dark band, this being due to the retractors stretching the tough fascia over the vein, flattening it and partially emptying it of blood so that it is not clearly defined. It is well to ease up on the retractors at this point to allow the vein to fill and declare its exact limits, after which the fascia is nicked and split with knife or scissors nearly the whole length of the wound, far enough back of the jugular vein to avoid opening into the carotid sheath, and yet not far enough to get behind the muscles upon which the sympathetic nerve lies.

The carotid sheath, with its contents, is now retracted gently upward and forward, great care having been taken not to open this sheath and thus take away its firm support from the very elastic walled jugular vein, which may in that case swell to the size of a garden

hose and bulge into the wound. The cervical sympathetic cord will now be found lying upon the rectus capitis anticus major, and just beneath a thin, delicate fascia through which it may be seen fairly well. We have not found it to lie boldly outlined, as some authors would have you believe.

Another nerve cord, the phrenic, may be seen in this locality. It is, of course, to remain uninjured. To positively identify the sympathetic it may be necessary to trace the nerve up or down to its several ganglia. remembering, however, that the middle one is often absent; or it may be necessary to locate the inferior thyroid artery, immediately upon or beneath which is the middle ganglion, or portion of the cervical sympathetic.

The inferior ganglion need not be sought (except for identification) in the operation for glaucoma, nor is it easily seen, as it dips almost into the chest. The cervical cord is lifted with forceps and freed from the thin overlying facta, then traced upward to the superior ganglion, which lies in the extreme upward and of the wound, deep behind the angle of the law. By traction on the nerve cord the branches of the ganglion are recognized and seal the servered with small curved strabotomy scissors; this frees the ganglion from above. The ganglion with about an inch of the cervical sympthetic nerve below is now excised in one piece.

Upon severing the superior ganglion an immediate contraction of the corresponding pupil is noticed. The wound may be cleansed with saline, if desired, then the split muscle is united with catgut and the superficial wound closed with any suture desired, which completes the operation. It has not been our practice to suture the deep cervical fascia.

The following points are considered worthy of note, namely: The employment of a thoroughly skilled anæsthetist; an assistant to steady the head and hold it in the position desired, and the complete splitting of the muscle, as mentioned.

In deepening the extreme upper point of the wound, the better to reach the superior ganglion, a sharp hæmorrhage is sometimes encountered from small branches of the larger vessels. This hæmorrhage is worthy of mention only because it obscures the nerve and ganglion by its stain. It should, therefore, be watched for and promptly checked. A dash of saline solution will do much to restore the natural color of the tissues.

If the above technique is followed, both sides may be operated at one sitting, if necessary, without any undue shock or bad after effects.

The results of this operation from the surgical standpoint are good. The operation should not be a severely dangerous one, if the technique is carefully carried out. The chief danger lies in haste, in mistaking the nerve, staining of tissues with blood, and insufficient length of incision, as already illustrated. The wounds in our experience have healed per primam, and the patients have suffered but very little pain. This, we believe, covers the results from the surgical standpoint.

The discussion of the results on the eye belongs properly to the ophthalmologists, and, as Dr. Blair has examined some of the patients since operation, he will be able to give you those results.

### DISCUSSION.

W. W. BLAIR: In the paper just read Dr. Gregg has given a very clear account of the technique of this operation. with certain valuable

hints as to its performance, a transit a good knowledge of the anatomy and a fair amount of skill, the partion ought to present no grave difficulties to the operienced surgeon.

In the cases which have charved, recover was prompt and was followed by very few disagreeable after effects. Of these post-operative conditions, the most constant appears to be ptosis; this usually disappears, though not consolate pip alteries.

Difficult and painful swallowing are usually present for a few weeks

Difficult and painful swallowing are usually present for a few weeks after the operation, but in the cases I have followed, disappeared com-A distressing form of neuralgia, affecting the neck and. shoulder on the operated side has been present in three cases, and in one case has lasted now for over a year, but in the past few weeks has been growing less severe. Trophic changes, which one might expect to encounter, have so far not been observed by any of the writers on this subject.

When we come to consider the value of this operation for the relief of glaucoma and attempt to assign it to its proper place, as a thera-

peutic measure, we are upon very debatable ground.

It is about six years since the operation was introduced by Jennesco, and since its introduction the operation has been performed in many parts of the world with varying, and seemingly conflicting, reports of

Up to the present time more than a hundred cases have been reported in literature: Axenfeld, in Germany; Wilder and, most recently, Loring in this country having collected and tabulated the reports of a great number of cases, with results that are rather confusing. That the results should be so diverse is easily understood when we find that the resection has been performed for the relief of glaumatous conditions in all of their varying stages, as, for instance, in acute inflammatory glaucoma, hæmorrhagic glaucoma, glaucoma simplex, in eyes in which vision had been totally lost, as well as in more favorable cases.

As above indicated the question of the efficacy of the procedure is still to be considered as doubtful; of this much, however, we may feel assured, resection of the sympathetic has not to any extent supplanted iridectomy or sclerotomy in acute, inflammatory or hæmorrhagic glaucoma, for in this class of cases it has been shown conclusively to be without any permanent good effect.

So that according to Axenfeld, Weeks, Wilder, Abadie and others, sympathectomy may be performed with most hope of success in glaucoma simplex, or those cases of the noninflammatory type where there is great reduction in the vision, narrowing of the fields, with but little rise in the tension, and no pain nor halos around lights; and it is in just this class of cases that the older forms of treatment have been followed by no improvement, and even in some instances by a sudden aggravation of all the conditions.

As to whether the operation should be bilateral or not there is also a difference of opinion, but a study of Loring's table covering some forty cases would seem to indicate that the bilateral operation produced more favorable results, though not in a very marked degree.

Referring to the histories of the two cases mentioned by Dr. Gregg, I would say that they were both typical of the class which we designate as glaucoma simplex.

CASE I. Mrs. C., age sixty, complains of failing vision for three years. Status præsens: O. S. completely amblyopic, tension slightly raised, pupil dilated to about four mm. and fixed; the visual field is contracted to a small central area oblong in shape and extending 10 degrees above the fixation point, 5 degrees below and approximately 15 degrees to the nasal and temporal sides of that point. Ophthalmoscope shows all the characteristic signs of advanced glaucomatous degeneration.

O. D.,  $V = \frac{6}{60}$  with + 1.50 s.  $V = \frac{6}{18}$ . Tension plus 1. There is no pain nor redness of either eye, nor any halos around lights, but she is troubled a good deal with subjective sensations of lights and colors.

Iridectomy had been advised for right eye by another oculist and refused. Accordingly on March 21, 1904, a resection of the right superior cervical ganglion was performed after the method described by Dr. Gregg. Immediately following the operation the pupil contracted to 2.5 mm., and on the following day the tension was reduced to normal.

Four weeks later the pupil was still contracted to 2.5 mm., the tension was normal and the field had enlarged to rather more than

double its size at the time of operation. With + 1.50 s. V. =  $^{\circ}/_{12}$ . This very manifest improvement has been maintained up to date, having been confirmed by examinations repeated at intervals of every two months since the operation.

CASE 2. Mrs. H., age 46, consulted me on January 24, 1904, complains of a cloud before the eyes which obscures vision.

O. D.,  $V = \frac{6}{12}$  with -1.00 s. +2.00 c. ax,  $20^{\circ}$ ,  $V = \frac{6}{9}$ .

O. S.,  $V = \frac{3}{60}$  (not improved by glasses).

Pupils of both eyes show a large coloboma upward, a double iridectomy having been performed two years ago, since which time the vision has gradually failed. Ophthalmoscope shows in both eyes all the signs of advanced glaucomatous degeneration. Tension in each eye is plus I.

The visual field in O. S. was contracted to a small circular area at the fixation point. In O. D. the field was contracted concentrically to about two-thirds its normal limits. Patient declined to consider any operative measures until May 1st, when a resection of the superior cervical sympathetic ganglion on each side was performed by Dr. Gregg. Immediately following the operation both eyes were slightly suffused, and the tension felt normal; no effect could be noticed upon the pupil—this may or may not have been due to the previous iridectomies, which in each case had ablated one-fifth of the iris.

Five weeks subsequently the vision was found to be exactly the same as when taken just previous to the performance of the operation. Subsequent examinations show the condition to be holding just about the same, the fields have not narrowed, nor has the vision fallen below <sup>6</sup>/<sub>9</sub> with correction.

The results in these two cases would seem to indicate that while in No. 2 no improvement was obtained, the disease appears to have been temporarily arrested; in No. 1, on the other hand, a decided improvement was had and is still maintained; how long the benefit in these cases will endure time only, of course, will show, but judging from what I can observe and from the literature, I should say that sympathectomy may be expected to take its place as a measure of relief in glaucoma simplex; whereas in the acute inflammatory type of the disease it is of little or no value.

W. B. Kreider: The operation under discussion, as delineated by the essayist, is a capital operation, and all operations of a capital nature, involving exposure to fatality and the less important one (in a cosmetic sense) of an exposed cicatricial tissue, will be well weighed by the physician and patient before they are undertaken.

The question then presents itself to the ophthalmic surgeon: Is the risk of mortality too great, or is the gain in vision commensurate with the risk involved in this capital operation? No doubt we can waive this question and merely state that none but capable operators should undertake an operation involving by close contiguity the carotid artery, jugular vein and important branches of the pneumogastric nerve. The

reports of this operation as gleaned from various sources would encourage us to believe that the rate of mortality was the smallest of any of the capital operations, but being a comparatively new field of surgery, this operation no doubt has only been performed by the most capable and careful surgeons. Dr. Ball in his Modern Ophthalmology says of nearly one hundred cases operated on for glaucoma, only one death resulted, and that was due to accidental infection.

On this subject, to digress slightly, in a recent issue of the Journal of Nerrous and Mental Disease appears a contribution on The Value of Bilateral Cervical Sympathectomy for the Relief of Epilepsy, by W. P. Spratling and Prof. Roswell Park; these authors state the effect of the operation as two-fold; first, by cutting off a certain amount of sensory stimulation from the viscera, and second, by influencing directly the circulation of the brain by changes in the caliber of the blood vessels through the action of the vascular nerves. The a priori reasoning holds good in glaucoma, and we have the anomaly of the operation of cervical sympathectomy for different pathological conditions; the essayist mentioned a few, namely, optic atrophy, Graves's disease, and ophthalmic migraine, and I may be pardoned for adding epilepsy. As a matter of pathological comparison, and in my research, I find this operation for the relief of epilepsy antedates that for the treatment of glaucoma. In the two conditions we have this in common, that in epilepsy we have the report of authentic cases that were cured by the correction of refractive errors, and in glaucoma we relieve all eye-strain and equalize the circulation of the eye by all methods at our command, that may be the fitting of proper lenses, the use of myotics or vibratory massage, and the various operations

The operation of cervical sympathectomy for glaucoma may not as yet have reached its legitimate field. Dr. L. Webster Fox in his late edition on diseases of the eye says: "Removal of the superior cervical ganglion of the sympathtic has not yet assumed its proper place in the treatment of glaucoma, and is still in the experimental stage." The same author, quoting Jennesco, says: "The operation has been shown to reduce tension and produce marked contraction of the pupil, that attacks of headache and other symptoms of irritative glaucoma are prevented, and in the absence of trophic changes vision improves. In addition to the results mentioned tachycardia, exophthalmus and death

have been reported as sequences.

Again, referring to the operation for epilepsy, statistics of 122 cases under careful observation by different surgeons show 6.6 per cent. definitely cured; 13.9 per cent. as apparently cured; 18.9 per cent. as improved; about 55 per cent. unimproved, and 5.7 per cent. died. From these reports we infer the death rate to be not above the general average of other capital operations.

Prof. Park in three successful operations for epilepsy submitted the resected nerve to a histological examination, and found in two of the

cases marked degenerative changes. I mention this fact to encourage the research in glaucoma, as the essayist quotes Jennesco in saying that he considered glaucoma of central origin, and it would be interesting to determine, if we, in any case, found degenerative structural changes in the cervical ganglia in glaucoma.

in this line we might theorize; but to be practical, what have we as ophthalmic surgeons in cervical sympathectomy better than we have had in our established and verified iridectomy and sclerotomy for glaucoma? I understand the same conditions obtain for the indications of an operation: chronic irritative glaucoma, or in the exacerbations of acute glaucoma. Even the question here presents or not to operate at all.

A case in point: In March, 1904, I was called to the home of Mrs. C., age 48, giving me a history of intense paroxysmal headaches of eight months' duration. Pain and congestion of the eyes; in fact, a sick woman under the care of two general practitioners, all this time without referring the case for a special examination of the eye. To the oculist one glance at the eye and one touch on the eyeball told the tale. The enlarged pupil, increased tension and cupping of the disc presented a typical case of subacute glaucoma; vision was 20/120. I evpected to operate, but was requested to try other means first, which I did, using eserin locally, gelsemium internally and vibratory massage—using the Garey ophthalmo-oscillator over basilon region and affected eye. In three months' treatment the eye was quiet, tension normal with vision 20/40, and no further treatment given, as the patient was satisfied with results.

This case is not presented for a precedent, merely as initiative for comparison.

It is hardly to be expected that members of this society, located away from the centrally populated districts, can discuss the results of this comparatively new operation in glaucoma from a personal standpoint, hence I may be pardoned for quoting an author on his conclusions as to the value of excision of the cervical ganglion in glaucoma.

Dr. Ball, in his treatise, Modern Ophthalmology, says: "The effects of removal of this ganglion are immediate and remote. The immediate effects are relief of ocular pain, the production of lachrymation and conjunctival injection, unilateral swelling, contraction of the pupil and reduction of intraocular tension. The improvement in vision may be immediate or remote, but unfortunately is not always lasting. The remote effects are ptosis, slight exophthalmus and a feeling of heaviness in the head. Lachrymation and conjunctival injection are transient, passing away in a day or two."

This author's conclusion is that cervical sympathectomy does not

rank with iridectomy in remedial value.

The operation is admissible where iridectomy or sclerotomy is refused, in hæmorrhagic glaucoma and in glaucoma simplex with great

loss of vision, where iridectomy had not benefited. In absolute glaucoma with pain, sympathectomy may be tried before resorting to enucleation.

Whether the curative effects of sympathectomy are as lasting as those of iridectomy or sclerotomy, and whether or not sympathectomy can prevent threated glaucoma, are to be determined in the clinical balance.

G. DeWayne Hallett: My experience in this operation is limited to one case in which the operation was performed at the New York Ophthalmic Hospital on the 25th of May last, and of which I am able to show the ganglion suspended in this bottle.

The latest writings that I have examined seem to tend to the opinion that it is necessary to remove both ganglia in order to obtain permanent results. This arises from the fact that there are small anastomotic filaments, which, in time, allow the other ganglion to exert its influence upon the glaucoma. I took occasion to dissect the parts and perform the operation, experimentally, upon the cadaver. We went in anteriorly and also posteriorly to the sterno-cleido-mastoid muscle, but it did not occur to me to split it, as mentioned by Dr. Gregg.

The posterior method seemed to be the most suitable in our dissection. Anteriorly the mastoid process renders it less easy to expose the ganglion. Posteriorly you go at least half an inch higher. It did not seem to me that any undue traction was necessary in order to expose a considerable field, provided the incision had been made ample enough. The spinal accessory was the only considerable nerve reached, and that seemed to carry forward easily without dividing. When we discovered the ganglion, we found it was in the fibers that went to make up the sheath, and opposite the spinal process of the first cervical vertebra. The operation seems to be one for the general surgeon rather than for the specialist.

The case operated was Joseph P., an Italian, 24 years old, and presenting many scrofulous symptoms. There was a numerous family, many of whom had died in infancy, and two adults of phthisis.

Chronic purulent otitis in childhood had left my patient quite deaf. For six years he has suffered with inflammation of the anterior tunics of the eye, involving the right eye first, upon which an iridectomy was made for glaucoma. Later, and particularly in the last two years, the left eye has gone through the same process of painful inflammation. When he entered my clinic in April last I found the following conditions: Right eye, ectasia of cornea and sclera, maculæ of the cornea, coloboma of iris from iridectomy, tension — I, vision represented by the ability to count fingers at 18 inches. Left eye, ectasia of the cornea and sclera, maculæ of the cornea, ulceration, cloudy epithelium large pupil, deep anterior chamber, tension + 2, and ability to count fingers at 12 inches. In consultation with other ophthalmic surgeons it was decided that a sympathectomy offered better results than iridectomy.

This operation was performed on the 25th of May, by Dr. George

W. Roberts, I acting as first assistant.

The wound was made posterior to the mastoid muscle. The spinal accessory nerve was carried forward and the ganglion found in the common sheath opposite the transverse process of the first cervical vertebra. Following the operation there was immediate contraction of the pupil, and one-half hour after the tension seemed to be normal. Two days later the tension was plus one, the pupil still small, no pain. June 1st, tension plus one, patient comfortable; pulse was not accelerated beyond 100, there was no ptosis nor sweating of the face. On the 6th of June he complained of pain in the shoulder, no pain in the eye since the operation. June 20th the pupil was large, the tension plus one. The patient asserts that he can see better, and the test is twelve inches better; he can identify visitors as he could not before the operation.

It occurred to me that in all probability this young man had a vicious inheritance; it is not likely that he will ever see better than he now does, i. e., fingers at two feet. If necessary an iridectomy can be performed later.

C. Joseph Swan: Emphasis should be laid upon the exact field of usefulness of this operation, which is too formidable to be lightly entered into. I have not had any of these cases myself, but have seen the results of some operations. I believe that it has a field of usefulness, which is where iridectomy has failed, chiefly in glaucoma simplex:

R. S. COPELAND: I believe that this operation has also a field where one eye, for some reason, has been destroyed and vision depends upon the one remaining eye. Naturally the operator hesitates to make an iridectomy for fear of secondary cataract or loss of vision from suppuration. In a case of glaucoma simplex in such a patient, this operation may be indicated. At least it appeals to me as a much safer procedure than to tamper with the eye itself.

DR. GREGG: I have nothing to add, except that we never exposed the spinal accessory nerve; the only nerve that we encountered was a

superficial one.

#### MALIGNANT MYOPIA.

#### EMMA L. BOYCE HAYS, M. D.

#### Toledo, O.

HE choice of this topic for my paper does not indicate that I have any special message to give to the medical world; but having come in contact with some cases of this kind, and having found a very limited amount of literature on the subject, I decided to add my mite to the not overcrowded number of cases reported.

Myopia is considered in the text-books as the accompaniment of civilization. Perhaps this is more in evidence in the European countries than in North America, as Europeans, particularly Germans, pays so much more attention to detail in study than Americans, and not so much attention to hygienic conditions. North American Indians were not found to be afflicted with myopia, nor are savages in general. However, their eyesight is not so nearly normal as is usually conceded, for statistics show that by his constant training of sight for distance, the savage with vision below normal, may be enabled to see details at a much greater distance than his more civilized brother with normal vision, who has not had this training.

Again, while the myopic eye is considered a product of civilization, it is not shown that those actively engaged in mental pursuits, are, as a rule, myopic. Truth compels us to admit that the opposite is the fact, and that only those who have physical defects, or whose sedentary habits and neglect of hygiene have caused deterioration of physical condition, are afflicted with myopic degeneration. We also know that the most highly myopic eyes are found in imbeciles and idiots and those of inferior intellect, thus showing that eye and brain do not always develop together in harmony.

Every myopic eye is not abnormal. Symmetry of shape in an eye is as rare as symmetry of face or form. When, however, the conditions are such that the eye does the work required of it without irritation or discomfort, it may be deemed a normal eye. We may have an eye

which departs from the emmetropic standard by being of too great an antero-posterior diameter, but being non-irritated and healthy and conforming to the shape of the face, we may safely call it a normal myopic eye, in contradistinction to the abnormal or diseased myopic eye.

I cannot agree with the writers who call every myopic eye inflamed or diseased. With the wide differences in shape of skulls, and with the demand for binocular vision, it is easy to see that in some instances the long eye, adapted to divergent rays, is the normal eye for that individual, and, that, although not conforming to the standard set for the emmetropic eye, it is not necessarily a diseased one.

In a business extending over twenty-one years I have had the opportunity of seeing many cases of myopia which have remained stationary in spite of the fact that their possessors have used the eyes continuously for fine work over that entire period.

The eye of the infant being hypermetropic at birth must necessarily increase in size with the growth of the child to become emmetropic. In healthy children this is a regular development. In children abnormally undeveloped, with flabby muscle or unduly afflicted with so-called children's diseases, or having inherited a constitution affected by the sins of the fathers, the tissues are all weak and lacking in tone, and not capable of perfect symmetrical development. Consequently when the average amount of work is given the child his eyes, not having developed in the average way, are below the standard and stretch in some meridian in the effort at continuous accommodation; thus the first step is taken toward progressive or malignant myopia.

Usually the first defect is that of astigma; if we treat the eye as an instrument and simply correct the existing defect with lenses, in these children afflicted with dyscrasias, we will find later a diseased eye. As a rule, we do not come in contact with those cases until the eye is myopic and in the progressing stage. I do not wish to be understood as saying that all eyes have this tendency, but am speaking of the eyes with the tendency toward myopia.

There are many factors to be considered in these myopic eyes: causes and effects. The influence of the extrinsic muscles in producing an elongation, and the congestion induced by faulty position assumed by patient in near vision—there is no doubt that these have a pernicious influence, although a myopic patient with divergent squint or

exophoria seldom has an increase in myopia, or in the length of the eyeball. When the effort at convergence becomes too severe nature seems to come to the rescue and turns one eye out of the way, thus affording the needed relief.

I can best illustrate by giving a report of cases which may prove interesting:

I find in my books, 1893, Donald, aged three, with phlyctenular conjunctivitis; I also find written there calcarea carbonica 3x, for teeth, so take it for granted that his teeth were decaying unduly. My next entry is in 1896: Donald, aged 6, headache and eyes bothering him. Under atropin sulphate, four grains to the ounce, applied four times in three days, the vision for both eyes was  $^{20}/_{70}$ ; with plus 0.75 c. axis 90°, vision =  $^{20}/_{15}$ . The next entry for this boy was February, 1901, five years later. Complains of headache, and that he cannot see the blackboard. Again, under atropin,

R. V. =  $^{29}/_{40}$ ; with — 0.50 s.  $\bigcirc$  — 0.50 c. axis 180°, V. =  $^{20}/_{16}$ . L. V. =  $^{20}/_{50}$ ; with — 1. s.  $\bigcirc$  — 1.25 c. axis 180°, V. =  $^{20}/_{15}$ .

I found that he had worn his first glasses for about two years and then discarded them entirely, as he had outgrown his eye defect, according to his mother.

There was a change from plus 0.75 c. axis 90° to a minus spherical with minus cylindrical axis horizontal. Vision had increased from  $^{20}/_{70}$  to R. E.  $^{20}/_{40}$  +, L. E.  $^{20}/_{50}$ . February, 1903, Donald again presented himself, being unable to see the blackboard. Again under atropin. R. V. =  $^{20}/_{200}$ ; with — 2.50 s.  $\bigcirc$  — 0.50 c. axis 180° =  $^{20}/_{15}$ . L. V.  $^{20}/_{200}$ ; with — 2, s.  $\bigcirc$  — 1.25 c. axis 180° =  $^{20}/_{15}$ . Vision dropped from  $^{20}/_{40}$  to  $^{20}/_{200}$  in two years. On inquiry I found that the boy was ahead of his class, and was in our very poorly lighted high school, working entirely by electric light. I removed him from school one semester, kept him under atropin for several weeks, and gave him nux 3x and gelsemium 3x. His vision has remained the same ever since. His mother has hypermetropic astigmia, and gave a history of a syphilitic grandfather.

This case being followed from the starting of the boy in school, shows a change from hypermetropic astigmia axis 90° to myopic, axis 180°, with an increase of the myopia in two years of 2 D. No muscular insufficiency, boy apparently in good health and perfect surroundings.

CASE 2. Mrs. H., aged 60, November 13, 1901, called at the office

with vision, R. E.,  $^3/_{200}$ ; L. E., none. Can read No. 6 Jaeger test type with R. E. Found large retinal detachment in left eye of three months' standing. Christian scientists had been endeavoring to relieve her all this time. December 6, 1901, a month later, R. V. =  $^{20}/_{200}$ , with — 4. s. =  $^{20}/_{70}$ . During this time I gave her bryonia 3x and gelsemium 3x to reduce the congestion and clear up the vitreous. At intervals alium cepa 1x, for severe neuralgia. Bandaged left eye. She gave a history of progressive myopia; having been to Detroit and Ann Arbor for treatment, and change of lenses at various times. She had remained under the care of one oculist for one year and a half to prevent retinal detachment. Had also been out West and taken Weltmerism for nervous prostration, with relief.

Saw her January 10, 1902, two months later, when vision in R. E. was  $^{20}/_{50}$  with -4. s.  $\bigcirc -1$  c. axis 180°. It has remained the same-No vision in the left eye. July, 1903, saw patient again. Cataract had developed in the left, and she had severe neuralgia in both eyes; more marked in left. This continued at intervals for some weeks. Saw her last October, when she was comfortable.

August 18, 1904, a year later, this patient again presented herself at my office, saying that there was a change of some sort in her left eye, but no pain. Also said that she had never been more comfortable in her life than the last year. I saw a slight motion of the outer superior quadrant of the iris. So bandaged the eye and sent her home. The next day, August 19th, I called at her house in answer to a telephone call; found a partial dislocation of lens, and patient suffering some pain. Dilated the pupil with atropin. August 20th found the lens completely dislocated and floating in the anterior chamber. Patient suffering acutely. I wanted to do an enucleation at once, but she objected, so I removed the lens, making a broad incision, one-third down in cornea, to facilitate removal of lens, on account of fluid vitreous. Healing was uneventful, until the tenth day, patient being up around the house, when she had an attack of glaucoma, with tension plus four.

Treatment affording no relief I enucleated September 6th, two weeks after removal of the lens.

I found the sclera very thin, fluid vitreous, complete retinal detachment, and only a few shreds floating in the vitreous. The external eye muscles and conjunctiva were very much stretched and atrophied. Recovery was uneventful as far as the eye was con-

cerned, but the patient had a bowel trouble which almost sent her to her grave. She had from six to eight movements in an hour, mornings. I finally controlled them with a high enema of quinin sulphate, six grains to the pint. The right eye has been comfortable, and since the loss of the other eye its vision has improved slightly. She has aching pain in socket of left eye occasionally.

This woman was not a student, nor did she make any excessive use of the eyes. I find that her family almost without exception wear glasses. I have operated on one cousin for cataract, and have another cousin waiting for one to ripen. Her mother and an aunt also had cataract.

The immediate cause of lens dislocation was a bump on the head, so slight, however, that she had forgotten it until questioned regarding some traumatism.

The first case illustrates the abnormally myopic eye, and had I known the family history in the first place I might have been able to control the myopia sooner.

The progressive form is only too common, and while the percentage of cases in my own business is small, it is large enough to be worthy of consideration. In all of them I use atropin at intervals, try to secure rest of the eyes, and keep the general health good; I have varying success from checking the disease to complete loss of the eye.

#### DISCUSSION.

WALTER STRONG: Anything relating to refractive errors should prove a most worthy topic for discussion by the members of this society, and when it comes to a consideration of myopia in any of its numerous phases we certainly have a subject which enters into our everyday practice, and on that account is deserving of our most careful attention.

The term malignant myopia appears to be rather an elastic one; by some authors it is employed to designate those cases in which there is a steady and rapid increase in the myopia, while by others it is used to denote any case of myopia in which there is an intraocular complication. Personally. I have limited the use of this term to those progressive cases of myopia which run a very rapid course, cases in which there is an increase of several diopters in a few months. And with this strict and narrow definition you will not be surprised to learn that in my practice these cases are few and far between.

It is very difficult to enter into a consideration of myopia without becoming hopelessly entangled in a discussion as to its cause, but I

am going to avoid this mooted point by simply stating that personally I incline to the inflammatory theory as being the most likely cause of this condition. And further than this I am going to admit frankly that this theory will not account for many of the conditions which we so frequently observe in these progressive or malignant cases.

The treatment of malignant myopia is easily summed up under the general heading of "unsatisfactory," for in these cases no matter what treatment be employed it seldom serves to stay the progress of this disease. To my mind the most rational treatment is the preventive, by this I mean an early and full correction of all myopia with frequent changes of glasses. When this condition assumes the progressive or malignant type it is of prime importance to put the eyes at complete rest, and with this object in view it has been my custom to employ some cyclopegic and limit the use of eyes to distant vision.

This question naturally brings us to a consideration of the advisability of removing the lens in high degrees of myopia; personally, I favor such an operation where the patient has lost useful vision and we

find no fundus changes to contraindicate such a measure.

ALTON G. WARNER: The question of what to do with cases of progressive myopia is often a very troublesome one. Dr. Boice Hays gets at the root of the matter in discussing hygiene. Our hope lies in prevention not cure, and in general hygiene as well as hygiene of the eye. When the public become educated to the point of having the eyes of all children examined once a year we may expect to solve the myopia question.

## PARALYSIS OF THE FACIAL NERVE.

1.5 : 1

E. L. MANN, M. D.,

St. Paul, Minn.

HE facial nerve entering the petrous portion of the temporal bone along with the auditory nerve at the internal auditory canal passes above and close to the vestibule, and emerges at what is known as the geniculated ganglion into the Fallopian canal within the middle ear. This canal has a thin covering of bone, starting just above the oval window, between it and the horizontal semicircular canal, and curving down and out posterior and external to the round window, it descends in an almost vertical line to the stylo-The canal thus circles the upper and posterior mastoid foramen. border of the middle ear, is deepest where it enters, and in its course gradually comes nearer to the external surface of the temporal bone. It will also be seen that in its course it bounds the opening between the middle ear and the antrum on the lower side. The layer of bone covering the canal is very thin, and oft times shows ossification defects, the nerve itself then being exposed in the middle ear. During its course through the middle ear it gives off a nerve to the stapedius muscle and the chorda tympani which traverses the cavity between the long process of the anvil and the handle of the hammer to make its exit by a small canal to join the lingual nerve.

Paralysis, partial or complete, of the facial nerve may arise from causes acting upon any portion of its course. Caries of the vestibule will effect the overlying nerve. Inflammatory conditions of the middle ear—giving rise to inflammation of the nerve itself or its neurilemma—pressure exerted upon the nerve by middle ear exudates, and last. but by no means least, mechanical injuries during mastoid operations.

While paralysis occurs in acute inflammatory conditions of the mid-

Fortunately a rare complication of ear diseases; the *bete noir* of mastoid operations, usually due to mechanical injuries. Anatomical course of the facial nerve through the ear.

dle ear associated with the grip, scarlet fever, etc., the rarity of its occurrence, coupled with the fact that in chronic suppurative cases the nerve may be found bathed in pus without paralysis, argues that these cases occur when the Fallopian canal is faulty, and the severity of the inflammation actually extends to the nerve fibers or the neurilemma. In cases of tubercular middle ear inflammation the proportion of cases of paralysis is greatly increased, estimated as high as fifty per cent., due to the fact that extensive ulceration and destruction of substance is a peculiarity of this disease. The occurrence of this paralysis leads one to suspect tubercular middle ear inflammation.

Bezold's mastoiditis, in which the inflammation centers around the large cell found in the apex of the mastoid, is occasionally a cause of facial paralysis, from the proximity of the descending portion of the Fallopian canal to this portion of the mastoid. But, other than this, paralysis is no indication of mastoid involvement, as the antrum and ordinary cells are not in close proximity to the nerve.

It is not the purpose of this paper to discuss at length the wounding of the nerve in the course of the mastoid operation. So much has been written upon this subject, and so many instruments devised to shield the nerve that the subject is familiar to all who do mastoid surgery, and the author has nothing original or new to add to what has already been written. Suffice it to say that this accident, if accident it may be called, has occurred in the experience of most operators, and Prof. Politzer, of Vienna, says it cannot always be avoided even by the most careful. We know the points of danger. We know the means used to avoid them, and we realize fully the necessity of watching closely the face of the patient, during operation, for the slightest twitching of the muscles. Finally, remember that the Fallopian canal runs so close to the aditus ad antrum, that it has been injured in curetting this opening and in the removal of the incus by the incus hook in the operation of ossiculectomy.

SYMPTOMS.—Paralysis may be ushered in by pain, by twitching of the facial muscles, by nothing. Post-operative paralysis develops either immediately after the operation or within the first day or two. The former case denoting cutting of the nerve, the latter injury causing a neuritis or perineuritis. The paralysis may be complete or partial, depending upon the severity of the cause. The most prominent symptom is the lack of facial expression on the affected side. This leads, secondarily, to conjunctivitis and epiphora, from inability to close the eye.

which, if neglected, may end in corneal ulceration; to partial loss of the sense of smell, from inability to dilate the nostrils; to imperfect mastication, from lack of power in the muscles of the cheek to keep the food within range of the teeth. Taste is affected through the chorda tympani nerve. Occasionally the hearing is rendered more acute through loss of power in the stapedius muscle, allowing more violent action of the stapes.

RESULTS.—(1) Return to normal after shorter or longer period. varying from a few weeks to months and even years.

- (2) Persistent paresis of whole or part of muscles supplied by nerve due to ulceration and destruction of its fibers, or to thickening and contraction of the neurilemma.
  - (3) Complete paralysis and atrophy of the muscles affected.

Prognosis.—Those cases in which the paralysis is caused by a neuritis or perineuritis usually recover in a period varying between five weeks and as many months. Cases in which ulcerative process has either destroyed portions of the nerve, or as a result the neurilemma becomes thickened and contracted, usually terminate in permanent paresis or partial paralysis. Post-operative cases, many of them, are simply a neuritis caused by concussion or slight injury and recover in a few weeks or months. The divided ends of the nerve at times unite, and even in those cases in which there has been destruction of a considerable portion of the Fallopian canal, we can comfort ourselves by the results in resection of branches of the fifth nerve for tic douloureux, in which in time the condition recurs, even when a considerable portion of the nerve has been removed. Bezold reports a case wherein the greater part of the Fallopian canal was destroyed, and yet, after a period of years, the nerve was regenerated and the paralysis cured.

These cases we give as a source of comfort to those unfortunate enough to meet this mishap, rather than as reliable data upon which to base a prognosis, for all cases do not recover, and there can be no more trying condition for both patient and operator than complete and permanent paralysis of the facial nerve.

TREATMENT.—What can we do for facial paralysis? When the condition is due to a neuritis or a perineuritis, the inflammatory remedies as belladonna, aconite, gelsemium, ferrum phos., given according to indications and accompanied by rest of the parts and by warmth are of undoubted value.

As to the use of electricity, I approach the subject with hesitation. Certain results of the use of the various currents we know, and they should be our guide in the individual cases. We know that the negative pole of the galvanic current increases the irritability of a nerve. We know that the interrupted galvanic and the Faradic current produce muscular contractions and have a trophic influence. We know that the sinusoidal current has a great stimulating effect on muscular tissue. Electrical applications have a very definite effect in preventing atrophic changes in muscular tissue during the time of nerve regeneration.

In the treatment of cases when a portion of the nerve has been destroyed, we must recall again that following operation for tic douloureux, the nerve reforms under a condition of rest, and must try to secure this condition for the divided nerve, but at the same time keep up the nutrition of the muscular tissue by massage and electrical treatment.

694 Endicott Arcade.

#### DISCUSSION.

W. M. STEARNS: An interesting case of secondary facial paralysis recently occurred in my practice. A boy twelve years of age whom I had treated occasionally for several years for acute coryza appeared with his first attack of otitis media, in the right ear, due to exposure

by playing in wet snow.

The drumhead promptly ruptured, allowing a free discharge of the usual character. Three days later his mother called me over the 'phone to report that the left side of his face drew around to the side when he laughed, while the other side remained motionless. On visiting the case an hour later I found partial paralysis of the right side of the face, which became complete the next day. Pain in the ear continued to be a prominent symptom, showing considerable swelling and consequent pressure.

At first I gave belladonna and mercurius, then gelsemium and mercurius, changing the gelsemium for strychnia 4x, a few days later, when the pain and discharge subsided; the latter remedies were given two weeks, when the mercurius was dropped and the strychnia 4x was continued four months longer, at the end of which time the muscular action of the face was nearly normal. A year later there re-

mained none of the paralysis and no ear symptoms.

Another case of complete paralysis of one side of the face with no other complication than acute coryza came to my notice. The condition had been diagnosed due to central lesion by a general physician,

and was treated three months as such. The man was thirty-five years of age and with no specific history, nor other lesion to which we could ascribe the affection. There was a history of exposure to severely cold wind while driving ten miles to which he was not accustomed, immediately followed by the coryza and facial paralysis. I made the diagnosis accordingly and the paralysis having lasted so long and no other symptoms being present I prescribed strychnia 4x and galvanism, under which permanent recovery took place in three weeks. The patient afterwards secured a large insurance policy from the New York Life, the medical examiner knowing the history of the case and my diagnosis and treatment.

J. W. STITZELL: I remember distinctly the first case of facial paralysis that came to me. There was only the slightest drawing of the face to one side when I saw him first; I could not tell at that time just how much drawing there might be in a few hours. I should have stated that this young man was suffering from chronic otitis media—one of those cases where there is a small perforation in Schrapnell's membrane. Because I knew that he had this condition I was dubious about the prognosis. He came to me but once; at the end of six weeks his mother came with the report that he was no better. I was surprised, and went around to see him. Like most young fellows he thought much of his personal appearance, but now he was the most horrible looking creature that I ever saw.

The right eye was standing wide open, there was a line worn on the cheek by the excoriating tears running down, and there were marked twitches of the alæ nasi; half a dozen twitches would occur spasmodically in five minutes and then an interval. I used the Faradic current; he had been unable to eat for some time, but after the treatment he began to eat, and in less than four weeks made a perfect recovery. Beside the Faradic current I considered that causticum was indicated, and gave that in the 3x.

EDGAR J. GEORGE: I have under my care a case of facial paralysis following facial neuralgia. There was no exposure to winds or to cold air to explain the attack; possibly it was brought on by the barometric condition or the very changeable weather that we have had here this year. Silicea controlled the neuralgia, and I am now using electricity on the face to stimulate the nerve. Recovery is coming slowly.

DR. MANN: I am glad that strychnine has been mentioned as a remedy in this trouble; it was an oversight on my part to omit it. In those ear cases that have been related here, I believe that the paralysis arises from involvement in the inflammation rather than from pressure. A common cause of facial paralysis, not mentioned so far, is mumps. I omitted it because I was dealing with causes of paralysis which originated in the ear; for this reason I also omitted reference to Bell's palsy.

#### XEROPHYLLUM.

The following eye, ear and nose symptoms were developed in the proving by the students of the Hahnemann Medical College of the Pacific, under Dr. Arndt:

Eyes. Dull.

Pain in eyes, especially the left eye. Eyes ache; feel full and distended.

Eyes sore, sensation in right eye as though an eyelash had turned in and were rubbing upon the eyeball every time I winked. Worse in the wind.

Eyes very painful, sore, burn some; arteries of eyes slightly injected-Pain in outer canthus of eye.

Dull pain in back of the eyes; eyes sore and sensitive to the light.

Eyes sore, red, painful; so persistent that I had to give up sewing. Eyes smart.

Eyes heavy: feel as though there were sand in them.

Eyes dull; pain between them; sore on touch; can hardly move them only slowly.

Eyes blur; lids look puffy. After looking at something in the distance it is very hard to focus them for close work. It feels as if there was an iron run from the eye to the eminence.

Eye symptoms as above, remarkably persistent.

Left eye blurred; pain at outer angle.

Aching in eyes, with catarrhal symptoms elsewhere.

Right eye bloodshot.

Left eye sore, inflamed; with considerable itching and puffiness of upper lids.

Swelling and redness of upper eyelid.

Eyeballs ache; sore to touch; feeling of sand in eyes; sensitive to light, especially in left eye.

Pinguecula on right eye, internal to cornea. Eyes sore, aching, slightly inflamed, worse from light, wind, use.

EAR. Upon awakening, buzzing noise in ears as though of a honey bee in the hair.

Pain in left ear.

Deaf; ears painful as though filled with pus.

Burning pain in left ear.

Nose. Sense of fullness at root of nose.

Feels stuffed. Tightness at bridge of the nose; very marked. Feels like dry nasal catarrh, with much pressure.

Pressive feeling on bridge of nose.

Itching on the nose.

Thin mucous discharge, worse out of doors.

Acute nasal catarrh.

# PRACTICAL HINTS.

Conducted by G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

Stricture of the Eustachian Tube. W. S. Bryant, in Annals of O., R. and L., Vol. XIV., p. 102, says that "Stricture of the Eustachian tube in aural diseases is not generally organic," and "nonorganic strictures are easily treated by the application of adrenalin and nitrate of silver solution to auditory regions by the nose and pharynx." He, of course, uses inflation by means of the catheter, and in some cases he finds the bougie necessary.

Hysterical Hemianopsia. J. Valobra considers the study of the eye symptoms of hysterical cases to be of great importance and interest. Hemicrania may be perfectly simulated by hysteria, and there may be present a homonymous hemianopsia that seems to be of organic origin. In hysterical cases the symptoms are only transitory, and follow the attacks of hemicrania for a short time only. These symptoms are somewhat rare; hence the author publishes a case in point, in a young girl of twenty-one years, who had all her life suffered from hysterical hemicrania, anæsthesias and other hysterical manifestations. Following a severe attack of headache she had homonymous hemianopsia of the left eye, persisting for ten days, and then cured very quickly by electrical suggestion. She had also abundant lachrymation of the left eye and mydriasis. Hysterical mydriasis usually accompanies amaurosis. It is probably due to a spasm of the radiating muscle of the iris innervated by the sympathetic. The pupil reacts to light and accommodation. The excitation of the cervical sympathetic also resulted in an excitosecretory action on the lachrymal gland. The psychological theory regards such phenomena as due to fixed ideas, spontaneous or suggested. The physiological theory regards them as due to an alteration in the function of the cerebral centers, independent of any ideas. Organic hemianopsia is cured by means of suggestion.

Foreign Bodies on the Cornea. Before removal cocainize thoroughly. Stand back of the patient and hold the head firmly against the chest with the left forearm in order to keep the head steady and give the patient confidence. Separate the lids with thumb and finger, making gentle but firm pressure on the eyeball. When holding the lid open with the fingers, always let the finger project over the ciliary border, otherwise the lid is apt to slip. The spud or gouge ought to be held perpendicular to the surface of the cornea so that in the event of the

ball moving, the instrument cannot strip up the layers of the cornea. Not only remove the cinder but also the scar, which may act as a foreign body and prevent healing. If there is much congestion give aconite internally. Hourly instillation of 1 per cent, cocain in boracic acid solution can be kept up until healing has taken place. Before discharging the patient turn the lid and examine the palpebral conjunctiva for any foreign substance. Manipulation of the eye is made more easy if the surgeon constantly cautions the patient to be very quiet or to look up or down as desired.

Gonorrhoeal Ophthalmia. Dr. Phillips, of Buffalo, says we are likely to have this disease to contend with so long as one-third of the adult female and three-quarters of the adult males continue to have gonorrhoea. For its treatment he advocates alphosone (succinic peroxide). claiming it to be non-toxic, non-irritating, non-painful, and not coagulating albumin, but powerful enough to kill the colon bacillus, pyogenic and pathogenic germs in one minute. in a 1-250 solution. Alphozone is 100 times stronger than hydrogen peroxide, and does not produce effervescence; it is 75 times more powerful than carbolic acid, 6 times as strong as silver nitrate, and equal to bichloride of mercury in the same proportions.

Duration of Life After Albuminuric Retinitis. S. Snell states that albuminuric retinitis occurs in about 30 per cent. of all cases of Bright's disease. It is a sign-post of the systemic deterioration produced by the renal lesion. It portends a fatality in possibly a few months, rarely deferred for more than two years, pregnant women excepted. H.

Suggestive Symptoms. Fidgety legs—tarantula Hispaniola, sincum metallicum.

Legs jerk while sitting, but drag on walking—mygale. Fetid ozæna; stitches through the chest—theridion. Perspiration stains the linen yellow—carbo animalis.

Cocain Mur., 5 per cent. aqueous solution, containing 2 per cent. of sodium sulphate, it is said, acts more rapidly and is more effective in the nose than stronger solutions without the sodium.

When Intubating the Larynx Dr. George H. Iler leaves attached to the tube a loop about an inch long of heavy aseptic thread; it is easily tolerated. For extraction, upon tickling the base of the tongue the loop is coughed up so that the finger readily engages it and pulls out the tube.

"Improved methods of street cleaning should be encouraged, for it is not too much to hope that in the future our streets may be really cleaned, instead of being partially cleaned as at present with the practice of dry sweeping, which often raises more dust in the air than is

collected and carted away. The dust which rises in clouds from the broom is the great carrier and distributor of the germs of tuberculosis, depositing the bacilli by millions not only all over the streets, but in the houses and in the throats and lungs of the people."—Chas. W. McDowell, M. D., Presidential Address, N. Y. County Hom. Med. Soc., Jan. 11, 1906.

Fels Naphtha, especially with warm water for laundry purposes, seems to have caused rheumatism, tingling and numbness of the hands and arms. In one case, at least, the symptoms disappeared after the use of fels naphtha was abandoned.

Dull, heavy pain or discomfort in the vertex should suggest disease of the ethmoid cells; if felt in the occiput or nape, the sphenoid cells may be suppurating or distended by mucus or a muco-purulent secretion; subjective symptoms in diseases of these cells are very misleading.

Repeated attacks of coughing after tracheotomy may mean irritation of the posterior wall of the trachea by the tube; change the length or shape of the canula.—American Journal of Surgery.

Aluminum instruments should not be boiled in soda solution, like other instruments. They are to be sterilized by boiling in plain water or by passing them through an alcohol or Bunsen flame.—American Journal of Surgery.

The threading of catgut or kangaroo tendon through a needle-eye not very roomy may be made easy by cutting the suture end obliquely and flattening it between the handles of the scissors. Silk must not be cut obliquely, however, for this makes it apt to unravel while it is being threaded.—American Journal of Surgery.

The use of an "invalid table." the shelf of which projects over the patient's body, will be found a great convenience during operations as a receptacle for instruments in immediate use. It saves time and temper, and avoids accumulation of instruments on the patient's body.

—American Journal of Surgery.

#### SOCIETIES.

The following resolution was adopted at the December, 1905, meeting of the New York County Homœopathic Medical Society, and it was voted that copies be sent to the homœopathic journals as well as to the Secretary of Agriculture:

In view of the fact that the U. S. Government is conducting a series of experiments to determine the effects of various drug substances, whether injurious or not; and

In view of the fact that homosopathic medicine is therapeutically based upon the proving of each single drug substance upon the healthy organism to determine its specific and exact action in disturbing cellular or functional equilibrium, and that, therefore, any government proving may be made of scientific value in the cure of disease.

We, the members of the Homoeopathic Medical Society of the County of New York, respectfully recommend that in further experiments a homoeopathic preparation of the drug stubstance be administered to several of the provers, and that the effects, mental and physical, with careful regard to the character, location, aggravation or amelioration (as from heat, cold, pressure) of each symptom be noted in all cases (also in those taking crude doses), that the government commercial provings may be made of therapeutic value to the 15,000 homoeopathic practitioners, to the hundreds of thousands of taxpayers under homoeopathic treatment, and to exact medical science in general.





# The Homeopathic

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No. 3

#### EDITORIAL.

#### LEWIS'S THEORY OF ACCOMMODATION.

N an interesting and suggestive paper\* before the Academy of Ophthalmology and Oto-Laryngology in Buffalo, September 14-17, 1905, Dr. F. Park Lewis, among other things, calls attention to the vascular plexus of the ciliary bodies as an essential, if not the most direct, factor in accommodation.

Ever since the discovery by means of the microscope of the structure of the ciliary muscle it has been generally assumed that focal changes are to be ascribed to its muscular action alone, and that the ciliary vessels have only secretory and nutritive functions.

Lewis contends that the ciliary processes are largely true erectile tissue.

The long fibres of the ciliary muscle are attached anteriorly in the sclero-corneal tissue constituting the boundary wall of Schlemm's canal. They are attached posteriorly to the choroid. The fibers of Mueller form the angular ring beneath those of Bowman. The physiologic action which follows would almost seem obvious.

"A contraction of the long fibers relaxes the zonule [?]. Coincidentally with this, the circular fibers surrounding the margin of the iris contract, impeding the free venous flow and causing the ciliary processes to become turgid with blood, they in turn pressing by their bulk on the anterior part of the suspensory ligament, of necessity flatten the edges and protrude the center of the lens in exactly the form that catoptric tests have shown to be present.

<sup>\*</sup>The Ciliary Process in Accommodation, Amer. Jour. of Ophth., Nov., 1905.

"Accommodation having been completed, the muscles relax, allowing the vessels, which had been full, to empty, in all probability in doing so allowing the overflow to pass into Schlemm's canal. It will be evident from this—as the artery leads by way of a very large capillary into the anastomosing mass of veins—that the passage of blood into the capillary processes is practically unimpeded.

"That an increase in bulk in the ciliary region occurs in accommodation, has been noted by Tscherning. who does not ascribe it, however, to the above cause. He says: 'There is formed during accommodation at the anterior surface of the iris a circular depression—the peripheral border of which corresponding to the ciliary body rises in a peak while the central border presents a very gentle slope corresponding to the anterior surface of the crystalline lens.'"

Although accepting Tscherning's observations as correct, the lenticonus and the tense zonule. Lewis does not think that any theory of accommodation heretofore formulated explains the mechanism of this act perfectly.

Quoting Tscherning and Stadfelt—that astigmia (increased curvature) of the anterior surface of the lens is produced during traction on the suspensory ligament in opposite directions at the extremities of a meridian—he feels the belief justified that accommodation is not always produced by the action of the entire ciliary body, but that opposing segments in the same meridian may in whole or in part correct the opposing corneal deformity. There are usually about seventy-two ciliary processes, which would divide the corneal periphery into arcs of five degrees each, as small a division of the circle as is necessary for an astigmic correction.

In normal accommodation, then, there must be a conjugate action on the part of each ciliary neuron with the corresponding neuron in the fellow eye. In astigmia nervous energy would be carried to corresponding groups in the two arcs of the same meridian in each eye and in unsymmetric astigmia to disassociated groups in unsymmetric meridians.

The large vascular spaces of the ciliary process are more characteristic of erectile tissue than of either secretory or nutritional function, and it is to be hoped that they will be closely studied with this theory in view. It is probably too much to expect that the nerve filaments governing certain similar ciliary processes can be traced through their respective neurons.

Can it be that erection of the ciliary process may relax the suspensory ligament? If not, Lewis as well as Tscherning and all other advocates of accommodation by tension of the suspensory ligament must explain away the tremor of the lens under eserin observed by Karl Grossman in his case of congenital aniridia.

Those invaluable observations\* are unique because the patient had no photophobia, no glaucoma, showed a small anterior and a smaller posterior polar cataract in each eye, possessed accommodation and transparent media. There were 2 D. of Ah. in each eye with hypermetropia of 6 in one and 7 D. in the other. Correction gave <sup>1</sup>/<sub>e</sub> and Jaeger 5 dif.

When asked to fixate "at eight inches the existence of accommodation seemed to be very doubtful at first. Though the ophthalmoscope seemed to show an increase of about 1 to 2 diopters, no trace of any ciliary processes could be detected anywhere. The zonula fibers were noticeable all around, although only faintly."

Five or ten minutes after instillation of eserin "when any jerky movements of the eyes are made, vertical or lateral, the lens shows a most marked tremor of about two or even four small but distinct vibrations. When not under the influence of eserin not a trace of this tremor can be seen, not even during the highest exertion of voluntary accommodation." Under eserin the ciliary processes became distinctly visible all around the circumference." "As far as can be ascertained, they have made a centripetal movement toward the visual axis, and do not appear to have moved forward toward the cornea. There remains a distinct interval between the ciliary processes and the lens everywhere."

The tremor is explainable by relaxed zonule and equal tension before and behind the lens. Is it susceptible of any other explanation?

In this case Grossman simulated accommodation by instilling eserin; it seems not quite accurate to consider his studies as studies of the eye in accommodation.

The tremor, probably, was not a spasmodic effect of the eserin; but was it not probable that the erectile tissue of the ciliary processes was actually so shrunken by the ischemic action of eserin upon its vascular supply as to be pathological? Surely it was not normal accommoda-

<sup>\*</sup>Brit. Med. Jour., Sept. 26, 1903, and Jour. of Ophth. and Lar., Nov., 1903, p. 348.

tion. Is it not conceivable that the ciliary processes were so shrunken by the eserin as to relax the zonule, thus allowing changes in the lens due only to muscular action and lenticular elasticity, and yet that the measurements under natural accommodation—if possible to make them—might have shown the tense zonule. The tremor did not occur in natural accommodation.

# TESTS OF FOOD PRESERVATIVES.

UR anticipations last month of the effect of the New York County Society's resolution are shown below to have been needlessly pessimistic. We are glad of this, but sorry to learn that some interpreted the editorial as condemning the resolution as unsavory politics and an aspersion upon Dr. Wiley. Upon rereading that page it will be seen that the only reflection upon the society's action was fear that it would fail, especially as worded, and that failure would have deleterious effects. The estimate of government beaurocrats was a natural result of past experiences. Dr. Wiley's letter shows him to be a courteous and liberal gentleman, an exponent—we trust—of the coming relations between the two schools; and is evidence that we should no longer expect injustice or discourtesy at the hands of Washington officials.

New York, February 6, 1906.

#### Mr. Editor:-

My attention was called to your editorial in the February E., E. and T. JOURNAL, and as I was instrumental in bringing this matter before the society and having the resolution adopted, I write to ask that you give the same prominence to this communication and to Dr. Wiley's letter.

- 1. There was no idea of politics in this resolution.
- 2. The department at Washington is willing to acquiesce in our plan, and we have communicated with several Washington homœopathic brothers who, we trust, will take up this matter. As Dr. Wiley is putting Uncle Sam to the expense of these "provings" or tests, and no extra expense is incurred by the request of the county society—merely an additional detail—there was no good reason why the department should have refused.

3. You ask why it was not requested that the drug be given to "all" provers. We did not intend to court a refusal by asking too much; the fact that we asked nothing but that could readily be granted shows that the judiciousness of the resolution was not lost upon the Washington officials.

Very truly yours,
(Signed) W. H. DIEFFENBACH,

Washington, D. C., Dec. 18, 1905.

Dear Doctor Dieffenbach:

I have read with much interest your very courteous note of recent date regarding a more careful study of the symptoms connected with the experiments to ascertain the effect of preservatives, coloring matters and other substances added to foods upon health. I appreciate the spirit which you manifest, and I should be very glad to have some member of the homocopathic profession attend our experimental work and study for himself the symptoms produced. It is, of course, too late to go back over the work which is done, and we could hardly afford to repeat it for the sake of studying these very interesting problems which you mention. I should be glad, however, to invite some member of the homocopathic profession to be a regular attendant in the examinations of young men who may volunteer for any subsequent experimental work.

It gives me pleasure to accede to your request, and to have sent you under separate cover Bulletin 84, part 1, which is the only complete publication so far of results of our work. The bulletin on salicylic acid is almost ready for the press, and I will enter your name to receive a copy of that, if possible, of the first edition we publish. We have so many requests on file that it may be the first edition will be exhausted before your name is reached, as we have entered in the order in which they have been received.

Thanking you for your interest in this matter and for your expressions of approval, I am,

Respectfully,

(Signed) J. M. WILEY,

Chief.

We understand that in accordance with an arrangement between Dr. Custis and Dr. Wiley, the latter's invitation (above) will be accepted by Dr. G. C. Birdsall, namesake of the former.

# MALIGNANT GROWTHS OF THE THROAT.

#### BURTON HASELTINE, M. D.,

### Chicago, Ill.

T seems to me a formidable undertaking to speak to this body of special practitioners upon the subject of cancer. This is not from lack of material, for the subject is many sided and its literature is extensive. The difficulty is rather to avoid the unprofitable discussion of matter already sufficiently familiar. If in fleeing from this devil we seek the refuge of clinical reports, we are near to the deep sea of hasty conclusions derived from a too limited personal experience. Therefore, with one eye on the ocean and the other watching his satanic majesty, we will address ourselves to our somewhat delicate task.

It is assumed that the classification of neoplasms need not be discussed further than the mention of the two forms which especially concern us, namely, sarcoma, including all varieties, and carcinoma, which may include glandular and mixed tumors as far as they have to do with our specialty. The essential of classification is, of course, the embryonic, atypical type of tissue having the well known properties of malignancy. There are many subdivisions and varieties of interest to the pathologist, but for us it is sufficient to remember that carcinoma is the epithelial type, springing from epiblastic or hypoblastic tissue, while sarcoma is a connective tissue tumor springing Inasmuch as tissue never changes type, this from the mesoblast. distinction is fundamental and must be remembered by the clinician as well as the pathologist. In practice it is important in locating the primary focus of malignant disease and in selecting the means by which it is to be attacked.

The alluring topic of the cause of cancer we will leave to theorists and investigators. Down in Buffalo they are almost ready to prove its bacterial origin, while at Harvard they say something which being translated is "We give it up." Orth, of Berlin, in a paper before the International Congress at St. Louis, concludes, "No one has produced

proof that carcinoma is of parasitic origin." "There is no necessity to assume a parasitic etiology in carcinoma." For our present purpose it is sufficient to note that heredity, infection and all forms of irritation and trauma must be recognized by one who would deal with malignant disease successfully.

By the limitations of our title we are here to consider especially those manifestations of malignancy occurring in the larynx, pharynx and related structures, and it will not be necessary to discuss the two forms separately except as they present points of difference. The symptoms calling attention to the presence of carcinoma or sarcoma in this locality are in the early stages much the same. The trouble as described by the patient may be exceedingly variable, ranging from mild "catarrh" to all degrees of pain, obstruction and disturbance of function.

In laryngeal cases often the first symptom is voice disturbance, perhaps only moderate hoarseness, attributed to taking cold. This may go on to extensive invasion of the deep laryngeal tissues with almost complete aphonia before the patient suspects any serious trouble. Within the pharynx recognition is apt to be earlier as increasing discomfort sooner calls attention to a lesion that is more easily seen. Tumors in the vault may for a considerable time escape detection, but even here signs of obstruction or troublesome discharges usually call for attention at a comparatively early stage. Pain here is almost unknown, at least until too late to be of any diagnostic value.

Upon first acquaintance with a case the physician may find difficulty in differentiating between malignancy and the local lesions of syphilis or tuberculosis, and, perhaps, in the early stages, between benign and malignant neoplasms. Such difficulty should disappear, however, with the aid of the history, temperature record, microscopic and therapeutic tests. Along with this statement should go two words of caution, one regarding the early temperature of tuberculosis, the other concerning the taking of specimens for microscopic examination. The idea is too prevalent, I believe, that an elevated temperature, especially in the afternoon, is a necessary accompaniment of tuberculosis. A negative diagnosis is many times based chiefly upon the absence of this symptom and exceedingly valuable time is thereby lost. It is my opinion, and I believe the observation of others will support me, that there is an early stage of tuberculosis where a subnormal temperature for a portion of the day is just as constant and just as significant as is the

elevation in the latter stages. This may exist for a considerable time when it only rises to normal in the afternoon, and there is no elevation at any period of the day. When we recognize the overwhelming importance of early recognition of this disease the value of this clinical point becomes apparent. For accurate observation the temperature should be taken very early in the morning, preferably before the patient takes breakfast or rises from bed.

Our caution regarding microscopical slides is that we may base our conclusions upon the examination of a superficial portion which is not really a part of the essential neoplasm. It is perfectly possible, especially in laryngeal growths, to have a true carcinoma more or less covered by non-malignant tissue, such as small papillomata, which may be pulled away, and the examination of which would, of course, be misleading.

The loss of weight as a confirmatory symptom may be considered, but it is so variable as to be of only secondary importance. If early and pronounced it suggests tuberculosis, as in cancer it occurs only after considerable extension, and in syphllis it is generally not marked at any stage.

Blood examination at the present stage of our knowledge shows nothing distinctive, and is no material help in diagnosis. To the practiced eye a fairly positive diagnosis between these various lesions by direct inspection is usually easy. Tuberculosis, syphilis and cancer present locally such different characteristics that when uncomplicated they should not be confused. An exception must be made, however, in the case of pharyngeal or laryngeal chancre, which, with its present manifestations, may closely simulate either of the other lesions.

The diagnosis between sarcoma and carcinoma, aside from the making of sections, will depend largely upon the age of patient, location of growth and less positively upon the history of the case and the appearance of the lesion. Epithelioma is practically unknown in early life, while sarcoma is comparatively frequent. In the larynx and upon the tongue malignant tumors are almost always epithelial. In the naso-pharynx and sinuses the sarcomata prevail, while the tonsils are neutral with a leaning toward the connective tissue type. Sarcoma preserves longer its distinct tumor outline, deferring until later than epithelioma the state of ulceration and bleeding. Glandular metastases, however, occur earlier in the sarcomatous type. The adjacent tissues in sarcoma are usually red or dusky, while in epithelioma they

are apt to have a pale, or warty look. With these general principles in mind a diagnosis should be possible in the majority of instances even where a microscopic slide is not obtainable.

TREATMENT.—And now we come to the question most important of all, both to practitioner and patient: What are we going to do? As subjects for treatment these cases fall naturally into three groups:

- I. Those of doubtful diagnosis. (As between benign and malignant neoplasms.)
- 2. Those of positive diagnosis in which there is reasonable hope of thorough removal by radical operation. (Hope of such removal in throat cancer by any other method is never reasonable.)
- 3. Those of positive diagnosis in which there is no such hope.

  Before considering these groups separately it will be well to state a few premises which seem to me to be clearly established:
- 1st. Cancer is always at one stage of its existence a purely local disease.
- 2d. If every particle of this local disease be removed without serious detriment to the patient he is cured.
- 3d. If this local disease be not removed it tends to involve an increasing area of tissue, becoming more and more general in its manifestations and producing in practically all cases, directly or indirectly, a fatal termination.
- 4th. Therapeutic measures (internal remedies, radio-therapeutics, serum injections, etc.), while undoubtedly influencing the course of this disease, are so uncertain in effects and so rarely curative that dependence upon them to the exclusion of more positive means is unwarranted and dangerous.

With these principles in mind the logical procedure is in most cases apparent, the question becoming one of technical detail.

Group one is small, as it is rare that the taking of a specimen in these cases is not a feasible procedure. If it entails any considerable discomfort to the patient he should be properly prepared, and the growth removed as thoroughly as possible by the simple operation with snare, forceps, etc. The entire structure of the growth should then be submitted to one skilled in such examinations. If malignancy is discovered, the patient should be kept under strict surveillance, and with the slightest recurrence the case becomes one of the group next to be considered.

With increasing skill on our part and better education of the laity

should come a proportionate increase in the size of group two. Early recognition and radical removal is the one hope for the patient with cancer in this particulr locality. And the term "radical," in my judgment, excludes all operations with snares, forceps, cauteries, etc., through the natural orifices. I am aware that results called successful from such procedures have been reported. In a recent journal an operator describes the removal of a post-nasal sarcoma with the Gottstein curette under local anæsthesia, and says there is no recurrence after four months. Another writer reports removal with cold snare of a round-celled sarcoma, no return after several months, and one with no return in two years. The value of such reports will be differently estimated. From a personal experience that cannot claim to be extensive, I would say I believe they are dangerous. Admitting an occasional possible benefit from such measures, it is more than counter-balanced by the mischief usually wrought by these necessarily imperfect operations.

It was my first intention to discuss the technique of some radical operations, but my paper has already grown to such proportions that this seems to me uncalled for. The laryngeal operations for partial and for complete removal are familiar to all. The pharynx will always be a field where the general and the special surgeon meet and struggle for the mastery, while the mouth is open to all. The nasopharynx is at present a rather obscure territory, and concerning this I have just a word to say. I have made the journey by several routes to this region, including the sphenoid and posterior ethmoid sinuses, and in my judgment the palatal route is in every way the best. By this I do not mean the Rouge operation through the antrum, which is only necessary when the anterior structures are to be removed, I mean the splitting of the palate from the mouth with removal of as much of the bony plate as may be necessary. Free access is thus given to the nasal cavities and hæmorrhage is more easily controlled. A preliminary tracheotomy is usually advisable, with packing of the lower pharynx. The operation is completed by uniting the soft tissues very much as in the operation for cleft palate. With proper union there will be no inconvenience from absence of the bony plate, and even a small aperture toward the front is of no consequence. External deformity is, of course, entirely avoided.

In advocating radical operation for all cases where feasible it should not be understood that even here we are to depend upon surgery alone. The disease must be combatted by every means we have, and following operation it is well, I believe, to continue active treatment for this purpose. Since these measures will be much the same as those used for inoperable cases, they may be considered under the following group:

The treatment for group three is, of course, chiefly palliative. It seems well established that some cases have been cured by other than surgical measures, but the number is so small that the outlook in any given case is gloomy. The administration of such remedies as the arsenic compounds is no doubt helpful, but for definite results we are mainly dependent upon serum injections and radio-therapy. Increasing experience seems to define their special spheres of usefulness about as follows: The serum is best used in the mixed form, and is most effective in the sarcomatous variety of tumors, although occasionally helpful in carcinoma. The X-ray or radium is useful, chiefly in the epitheliomatous type, and then only when the growth is so placed as to be accessible to the direct action of the ray. In properly chosen cases its value is undoubted, and with skillful and persistent use complete cures may occasionally result. It should certainly be employed in every case of epithelioma, following operation where such is made, and as a routine measure in all cases where for any reason an operation is not performed.

We reach, then, the following conclusions regarding malignant growths of the throat:

- 1. If diagnosis is doubtful, make a simple operation and examine.
- 2. If diagnosis is positive make a radical operation wherever possible and treat subsequently.
- 3. If diagnosis is positive and operation unsafe, treat sarcoma with serum and carcinoma with the X-ray or radium.

100 State St.

#### DISCUSSION.

IRVING TOWNSEND: In my private practice, and an experience of seventeen years in one of the largest throat clinics in the world, I have seen less than twenty cases of malignant disease, and in few of those requiring radical operation was that procedure deemed safe or advisable.

The fibrosarcoma, as seen in the nose and nasopharynx, is operable in the earlier stage of its development, and the same may be said of epithelioma of the lips, tongue and oropharynx.

Unfortunately, few of these cases apply to us for treatment until the disease has invaded the adjacent tissues, and involved the lymphatic glands to such an extent as to render complete extirpation an

impossibility.

The differential diagnosis between the lesions of syphilis, tuberculosis and malignant disease is seldom difficult if the means suggested by the author are intelligently employed. The essayist states with truth that the symptoms of fever, dysphagia, dysphonia, emaciation, etc., are not diagnostic, and may be present in any of these diseases.

I wish to emphasize one point, however, as the crucial test to which every doubtful case should be subjected before any radical operative procedure is attempted, viz., the administration of a thorough course

of merculial inunctions and potassium iodide.

In suitable cases I fully concur with the author's conclusion that the radical treatment is advisable, and that no time should be wasted in futile attempts to effect a cure by means of caustics, X-ray or radium applications, and the injections of serums of doubtful origin and questionable utility. Such experiments may properly be made in inoperable cases, and as far as our present knowledge goes, it would seem probable that they may be frequently beneficial and sometimes curative.

The inoculation of malignant growths with the germs of erysipelas, as advocated and practiced by Coley some years ago, has never found favor with nose and throat specialists, and as far as my knowledge goes this method has never been considered available or used to any

extent by them for reasons that are quite obvious.

Formic acid has recently been revived as an antidote for local toxæmias and rheumatism, and it may be worthy of trial in the treatment of cancer.

Injections of strong mineral salts and acids may also be considered when operation is not advisable by reason of the patient's condition or the inaccessibility of the growth.

<sup>0., 0.</sup> and L. Society. The titles of papers announced for next September's meeting will be found on page xv of News and Business, among the advertisements.



# CORNEAL ULCERS AND THE CAUTERY.

THOMAS H. STEWART, M. D.,

#### Cincinnati, O.

ODERN pathology accords to pathogenic microbes an important role in the evolution of deep ulcerative and suppurative keratitis.

Since Metschnikoff founded his famous theory concerning phagocytosis, largely the result of experiments on the cornea, we look upon cellular infiltration as the cornea's main defense to microbe infection, and not the result of microbic invasion.

The migratory cells of the cornea have thus come to be looked upon as performing a double function, first that of combatting microbic action, and, secondly, they possess the power of softening the necrosed tissue adjacent to the healthy parts to the end of unloosing, digesting, absorbing and removing the dead portions. (Leber.)

The phagocytotic power of the cornea may be too late in its manifestation to perform its wonderful work and limit the destruction of the tissue, the transparency of which is so necessary to useful vision.

We place a high valuation upon the compress bandage in the treatment of corneal ulcers, the dry antiseptic dressing will absorb the secretions from the eye, prevent irritation from the winking of the eyelid and prevent the entrance of dust.

So, too, the judicious use of cleansing antiseptic fluids and the use of mydriatics and myopics have a well-defined place in the treatment of ulcers of the cornea.

We deem it wise practice to look upon all patients with ulcer of the cornea as needing proper stimulating general treatment to change the habit of the body to the end that general nutrition may be markedly improved.

But it so often happens that our best efforts fail in securing the hoped for improvement. Our internal remedies do not always show a result directly traceable to their use, and, finally, we resort to the direct local treatment with the cautery.

The range and application of the cautery treatment has not reached the well-defined place it would seem to deserve.

The infected ulcer of the cornea may be looked upon, for treatment purposes, as a local disease. In manufacturing centres ulcers of the cornea from injuries constitute a large portion of ophthalmic practice. and as these injuries occur in those who operate machines and power tools, the time element in treatment assumes a degree of importance that puts the ophthalmic surgeon to the exercise of his best efforts toward securing the best results in the shortest time.

Formerly I treated all corneal wounds and ulcers by cleansing, aiming to maintain asepsis, and resorting to stimulating treatment in sluggish cases. Iodoform, zeroform, garnothal and nosophine have been faithfully used. When indicated one per cent. solution of formalin, pure phenol and tincture of iodine, and when all else had failed the curette and the Saemisch incision have been resorted to.

The results did not seem all that they should be, and following the suggestions in the journals regarding the electro-cautery treatment of ulcers of the cornea I used this method as a last resort. The better healing of obstinate ulcers after the use of the electro-cautery led me to its use as soon as I found the aseptic method to be inefficient.

When the case is first seen, and the wound is small, I am contented to cleanse with boric acid flushing, and to apply a compress bandage. Flush the eye and apply a fresh dressing in twelve hours, then at the end of twenty-four hours if irritation still shows or infiltration has begun, my treatment has been to curette the necrosed tissue away, and then to very lightly and quickly touch the edges of the ulcer with a fine cautery point at a dull red heat, making the points of contact in the edge of the ulcer at its junction with healthy tissue and from two to three millimeters apart. Should the base of the ulcer show unhealthy spots, these are also very lightly and quickly touched. From two to four days later those portions still needing attention are again treated as detailed in the foregoing.

The after-treatment is simply the compress bandage lightly applied to keep the eye closed.

Atropin and eserin are used according to their already well-determined indications.

My results are better and quicker, and my expectations more certainly fulfilled, since using this treatment, for which I, of course claim no originality. The resulting maculæ are no larger, and in

many cases much less in area, than would have resulted from other treatment.

In the very destructive cases I lightly and quickly cauterize the edges, and then completely incise the ulcer with the cold steel knife.

The work with the cautery must be done instantaneously, so as not to heat the aqueous and probably cause a cataract..

The platinum point can be heated in the flame of an alcohol lamp, and equally good work can be done with it as with the electro-cautery.

The secret of success lies in doing the work quickly at each point selected, and in using the cautery before microbic infection has liberated the poisonous toxins which paralyze the blood vessels at the corneal margin and extend their baneful influences to the iris and deeper corneal tissues.

Traction Building.

#### DISCUSSION.

R. S. COPELAND: It is my view that corneal ulcerations are frequently of metastatic origin. The corneal tissue is just of the right kind to make a culture medium and undoubtedly germs lodge there, giving evidence of their presence by the formation of ulcers. In the treatment of corneal ulcerations we should never lose sight of the fact that there may be and probably is a nest of germs there which is responsible for the trouble. The cautery removes this source of trouble, and the after-results are more favorable than when the ulceration is permitted to take its ordinary course.

DAVID W. WELLS: I did not quite get the author's statement as to what point he regarded as the best. As a caustic I have used trichlor-

acetic acid, and got very satisfactory results with it.

HERBERT D. SCHENCK: In non-vascular corneal ulcers in poorly nourished subjects, a light application of pure carbolic acid has been the most successful treatment I have used. I have also used the cautery, and recall one case in which I used it was a woman with severe central ulceration. The vision was lost in childhood because of deep ulceration, and a dense macula covered two-thirds of the corneal surface. This became infected in some way, and the whole macula became ulcerated and very painful. It looked as if she was going to lose the eye. The prompt and extensive use of the electrocautery stopped the whole process, and the surface promptly healed. As the carbolic acid application is painless and prompt in superficial ulceration, I have not found it necessary to use the electro-cautery.

I. C. Soule: Recently I devised a small cautery point that has given me good results; it is a small platinum point of light wire about one-eighth inch long ending in a platinum ball two millimetres in diameter.

I close the circuit and heat this ball almost to a white heat. It holds the heat sufficiently long to cauterize, and can be applied just where you want it. I cauterize the entire surface of the ulcer, bottom as well as the sides; in that way I seem to get better results, and the scar becomes more contracted.

W. B. KREIDER: I would like to ask if any of the members have had experience with infectious ulcers from injury occasioned by running into hedge fences? It seems to me that the slightest injury from that sourse is sure to ulcerate. I have had many such caess; I treated them with trichloracetic acid; it gave good results and saved all my cases.

DR. COPELAND: I have no doubt that certain forms of injury to the cornea or injuries from certain substances are more prone to be followed by sloughing ulcers than others. How common it is to see such ulcers from fragments of stone getting into the eye, while an equal injury from some other substance is not nearly so likely to produce sloughing. The result depends, probably, upon the bacterial infection, and seems to be more commonly met in Europe than in this country.

J. M. PATTERSON: My experience with hedge fences has been like that of Dr. Kreider's. The slightest injury from a hedge fence, in my

experience, is sure to result in ulceration.

C. S. Rumsey: I have used both the trichloracetic acid and carbolic acids. I have not found either of them as efficacious as the electrocautery. I have had occasion to substitute the Oese, the platinum loop used in bacteriological work, and found it as useful as the electrocautery. The Oese has been used where I have been obliged to visit my patient. As to traumatism from hedges, etc., my experience is not different from those who have preceded me. I secure results from cauterizing that I did not obtain from the use of antiseptic solutions. I always examine the blood in corneal ulcerations if they do not respond promptly to treatment. I regard this as most important, and it has invariably enabled me to use lines of treatment that have cured the case.

G. DEWAYNE HALLETT: I have also used both of the acid caustics mentioned, i. e., trichloracetic acid and pure carbolic acid with good results. I believe, however, that I have had still better results with

the electric cautery.

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DR. STEWART: I have used a cautery point similar to that mentioned by Dr. Wells; I never had anything special made. I select the finest point and curve it at right angles or to suit case before me. I do not see that it could be improved on as you can do delicately and quickly just what you want to do. My objection to cauterizing the entire ulcer is that staphyloma is more likely to result. I gave up the use of escharotics, acids and the like simply because you can not control the flow of tears, and that means that you cannot control the application of the acid. If I was so situated that I had to get along without the cautery I would use nitric acid on a wooden tooth-pick as an appli-

cator, but I prefer the galvano-cautery whenever I can get it. In regard to the infection from hedge fences, I have observed that such wounds are considerably more infectious than others. I have not made a bacteriological examination myself, but such an examination has been made to my knowledge; it did disclose plenty of bacteria, but, unfortunately, it was made upon the destroyed eye, and hence not of so much importance. For these traumatic cases I think that the cautery is the ideal treatment.

Konigstein believes that dionin is almost completely abortive of parenchymatous keratitis if used in the earliest stages of the disease, but considers the drug absolutely valueless in its later stages.

In Adenectomy, Stucky predicts that it will not be long before the forceps will be entirely discarded and the curette and finger alone will be relied upon. Also that the position of the patient will be on the side instead of the back, so as to eliminate much of the danger of suction of blood into the larynx and the prevention of swallowing blood and removed growth, thereby preventing much of the nausea generally attributed to the anæsthetic.

Naso-Pharyngeal Adenoids. After the pharyngeal tonsil is thoroughly removed, the enlarged faucial tonsils may rapidly assume normal size and function. While this is not the rule, Stucky has seen it occur so frequently that he considers it safe to say it is far more than the exception to the rule.

Whether recurrence is the development of some tissue not removed is an open question.

To Remove Rust From Instruments. "Place them over night in a saturated solution of stannous chloride, which causes the spots to disappear by reduction. Then rinse them in water, lay in a hot solution of soda soap, and dry. It is well to rub them with absolute alcohol and prepared chalk.

"Another convenient method for removing rust is to lay the in-

struments in kerosene.

"Paraffin oil is the best preservative against rust: One part of the oil is dissolved in 200 parts of benzine, and the objects, after being thoroughly dried and warm, are plunged into the solution. Instruments with joints, as scissors or needle-holders, are worked in the fluid, so as to cause it to penetrate into all crevices, and the benzine is then allowed to evaporate in a dry room." (Medical Standard.)

## SCOTOMA.

JAS. A. CAMPBELL, M. D.,

St. Louis, Mo.

ON GRAEFE was the first to call our attention to the importance of testing the field of vision, and to its great significance in the diagnosis and prognosis of disease. He demonstrated that in many intraocular diseases there are certain forms of contraction of the field of vision which are more or less characteristic of these diseases, and hence can be utilized in their diagnosis. And as each succeeding year has gone by, more and more the scope and meaning of breaks in the visual field have reached such a place of importance that to-day in many obscure and doubtful cases it becomes an all important factor in reaching a positive conclusion. Again, abnormal variations in the field of vision may also appear as a complication in certain cerebral nervous and organic disturbances, the knowledge of which may materially aid in reaching a discriminating and positive diagnosis.

The normal field of vision extends over definite and well-mapped out areas. It may be contracted or interfered with in many ways, and every change from its normal state has a definite cause and a diagnostic value.

That form of defective vision known as scotoma has been assigned to me for brief review. The term is applied to the condition where there are island-like gaps in the field of vision. In discussing it we must distinguish it from hemiopia, or half sight, although there are times when it is difficult to do so, for they may present very similar and blending symptoms.

The causes of scotoma may be either central or peripheral. Central when located in the perceptive functions or faculties, as in the brain, optic nerve or its terminal expansion, the retina, or choroid. Peripheral when vision is interfered with by localized obstruction in the dioptric media, as in the cornea, lens or vitreous.

The various names given to its modifications depend upon the

phenomena present. Negative scotoma is where there is an unnoticed gap in the visual field brought out only by tests. As an example of this the blind spot of Mariotte, corresponding to the optic disc, may be given, which might be properly called normal scotoma. The abnormal form is found when the diseased spot lies in the outer borders of the field of vision, and hence not so noticeable.

Positive or absolute scotoma is where the gap is dark, stationary and evident to the patient. This may be caused by a fixed opacity on the cornea, lens, or which is more usual, localized disease or atrophic spots in the fundus. Or, again, it may lie in the optic nerve fibres, as in retro-bulbar neuritis. It is found in disseminated choroidits, where the gaps correspond to the separate maculæ, visible with the ophthalmoscope. It is also found in areolar exudation, atrophic gaps; in detached retina; in retinitis albuminurica; in traumatic lesions of the deeper eye; in subretinal effusions or growths or cysticercus. It is seen in retinitis, pigmentosa, though when of high degree the whole field of vision is cloudy or sieve-like.

Central scotoma is the most disturbing form, for it involves direct vision. It is present in nicotine poisoning. It is a distinguishing feature of optic nerve atrophy, which is also accompanied by color defects, losing first the red, then green, and, finally, the blue of the spectrum. This distinguishes it from glaucoma, where the visual field is contracted, usually first on the nasal side, but the color sense is very little involved.

Central scotoma is found in spinal amaurosis, but with contracted pupil, thus differentiating it from atrophy of the optic nerve and glaucoma when the pupil is dilated.

Hæmorrhagic retinitis may cause scotoma by the localized changes. It will be central if at or near the macula.

In the majority of cases the ophthalmoscope may locate the lesion or cause, but sometimes central scotoma may exist without the least ophthalmoscopic evidence. Such cases depend upon the partial involvement of the optic nerve fibres, as in retro-bulbar neuritis.

Certain forms of scotoma may properly be termed psychic, as they seem to exist without any evidence of brain or nerve lesion. Closely allied to this is what is known as scotoma scintillans, a temporary shimmering dimness, which may occur from time to time, lasting from a few moments to half an hour, followed perhaps by vertigo and sometimes nausea, and even slight aphasia may accompany it. This is prob-

ably the result of some disturbance in the cerebral circulation, or reflex through the sympathetic system. It is most frequently found in intellectual, active brains, brought on by overwork, fatigue or hunger.

Scotoma may be associated with hysteria, which is probably also a reflex neurosis. In these cases the attack may last for a few minutes or may be prolonged for several hours.

Scotoma, usually central, may follow looking at direct sunlight. It is frequently seen after watching eclipse of the sun, when many look directly at the sun through a smoked glass, which cuts off the light rays, but permits the heat rays to pass through into the eye. This may produce heat coagulation at the focal point in the retina, and a permanent central scotoma may result, though if not prolonged it may be only temporary. Such changes are in the vicinity of the fovea centralis, and are visible as a pale orange colored spot with the ophthalmoscope. Recovery in such cases is unusual.

Another form of scotoma remains to speak of, and that is the blinding which follows looking at intense electric light. This usually involves the whole field of vision, though in numbers of cases only central scotoma results. Its effects are more apt to be temporary, yet permanent visual defects have been reported. It is one of the dangers in the intense prolonged brilliancy present in electric welding. It is the result of intense light rather than heat, for Widmark tells us that the retinal changes may appear without heat coagulation, being an cedema involving the rods and cones. Its prevention is wearing yellow glasses. In Germany a combination of blue and red is used, while the Sheffield workers prefer several layers of ruby glass.

Snow and moon blindness is more often a general diminution of the whole visual field, yet localized scotomata may appear. It is less apt to be permanent.

From the above it will be seen that scotoma is not of itself a disease but merely the result of some condition along the pathway of light perception. And that its varieties and peculiarities may often help us to a correct location and interpretation of the prime cause, and thus enable us to reach a definite diagnosis and reasonable prognosis.

Mermod Jaccard Building.

#### DISCUSSION.

E. D. Brooks: The author has shown a commendable directness and brevity as well as clearness of expression worthy of imitation, leaving

little room for improvement unless by elaboration, example, prognosis and treatment. As the prognosis is usually unfavorable as to restoration of vision to the blind spot, and treatment, where the involved tissues are destroyed, is useless except to prevent extension, and as the treatment of each case resolves itself into the treatment of the condition causing the scotoma, we can see the wisdom of leaving it out of a paper of this character. However, as choroiditis is responsible for many cases of scotoma, a study of the means of combatting that disease, when present in any case, is incumbent upon us as homoeopathists if we wish to give the patient the benefit of our great therapeutic law. Galvanism occupies no mean place in the prevention of the extension of inflammation and the absorption of exudations and hæmorrhages.

In the toxic scotomas, as in the same class of amblyopias, the discontinuance of the tobacco and liquor habit is essential. In this case, at least, "prevention surpasses cure." Many take the ground that tobacco alone does not cause scotoma, but that while the use of alcohol enables the smoker to enjoy still further his pipe, the system is brought more largely under the influence of the poison, and the optic centers and nerves receive the greater injury. Both poisons have no place in the healthy economy, and their use should be condemned in no uncertain terms. Central scotoma is often followed by strabismus, the damaged eye deviating from the line of vision, the direction of the deviation being sometimes, apparently, determined by the refraction, being outward in myopic and inward in hypermetropic eyes. I am not aware, however, that any definite rule has been established.

GEO. A. SHEPARD: Although I do not feel able to add much to the foregoing paper on this most interesting subject, there are a few points to which exception must be taken. The writer says: "Central scotoma is a distinguishing feature of optic nerve atrophy." In my experience this is not so. Usually the field for white and colors contracts con-

centrically, leaving central vision unaffected until late.

Central scotoma of cerebral origin is very rare, as it necessitates disease of both hemispheres. According to Henschen the macular tract lies in the anterior portion of the calcarine fissure, while Laqueur locates it in the posterior portion. Each macula has a center in both

hemispheres.

Toxic amblyopia or retro-bulbar neuritis has for its most constant symptom central loss of vision, first for colors then for white. Primarily, only the macular bundle of optic nerve fibers is affected. The leading causes of this disease are poisoning by nicotine, methyl alcohol, lead, stramonium and bisulphide of carbon, sudden chilling of the surface and suppression of the menses.

If we were in the habit of testing carefully for defects in the color field we would be able to make a correct diagnosis and to map out an intelligent line of treatment for these cases in the early stages of the disease instead of waiting until central vision has disappeared.

The oculist should be painstaking and not allow lack of time to keep

him from careful perimetric examinations.

Negative scotomata include all congenital defects of the visual field, such as opaque optic nerve fibers, coloboma of the choroid, old atrophic spots due to choroiditis, etc. Hysteria causes contraction of the visual field and disturbance of the color formula, but very rarely scotoma. Hemiopia and scotoma of central origin should always suggest an organic lesion of the occipital cortex or of the primary optic tracts.

DR. CAMPBELL: I wish that somebody would throw more light upon this subject. I purposely said nothing about treatment, and hence there is still much to be said. In hysteria we generally have contraction of the field of vision, but there may at times be central scotomata. I have had such cases. In the majority of cases atrophy of the optic nerve affect the temporal side of the fild of vision, but still it may cause the central defect. The causes of scotoma are so varied and the phenomena present so irregular that the evident latitude of views on the topic, both as to causes and treatment, is natural and to be expected.

Ethyl Chloride, W. J. McCardie says, is more toxic than nitrous oxide, and when used in properly selected cases, nearly as safe. Nitrous oxide, as regards safety, is still in a class by itself, and should be used where it can be administered. Ethyl chloride should be used rather to replace chloroform and ether in certain cases. i. e., for short operations needing longer and deeper anæsthesia and greater muscular relaxation than is afforded by nitrous oxide alone or mixed with oxygen. As a preliminary anæsthetic, it is unequaled.

In cases where there is much thickening of the tissues of the neck, or any suspicion of laryngitis, or ædema of the larynx, or narrowing

of the air-way beyond the mouth, it is contra-indicated.

The vapor, if concentrated, may originate spasm of the larynx, especially when the latter is inflamed; it certainly causes increased vascularity of mucous membranes. The mortality is about 1 in 10.000 cases.

The most serious after-effect is collapse, occurring principally after a single full dose in which no air has been allowed. The gas is in-

flammable and should not be administered near a light.

The best apparatus is a bag inhaler of wide bore which can be used for ether if the ethyl chloride be insufficient or unsatisfactory. The patient should be told to breathe very quietly, and no air is needed until snoring begins, as there are fewer after-effects when narcosis is quickly produced. A too small bag causes headache and even collapse from the carbon dioxide and other impurities.

# TECHNIQUE OF OPERATIONS FOR THE REMOVAL OF HYPERTROPHIED PORTIONS OF THE INFERIOR TURBINATED BODIES.\*

GEORGE B. RICE, M. D.,

### Boston, Mass.

E will assume that the hypertrophy is of the usual form, partly or completely filling the inferior meatus and interfering with drainage at the floor of the nose. The preparation of the patient for such an operation must depend largely upon the general and local condition present. It is not wise to perform nasal surgical operations upon patients whose general health is below par, and where necessarily the reactionary power is lessened. Such patients should receive treatment calculated to restore normal tone, careful directions being given regarding exercise, diet, bathing, etc.

If, with hypertrophy of the turbinated body, there is discharge of a muco-purulent character, or if the patient's occupation is such that he is inhaling irritating substances, or is exposed to septic influences, then preliminary local treatment is of much importance. Not infrequently these hypertrophies exist with the nose in a fairly satisfactory condition, i. e., the secretions are not perverted and there is no marked inflammatory condition present. In such cases preliminary medication is not necessary, and may be positively harmful. It has been shown that normal mucus has the property of rendering inert most of the organisms inhaled, and this is more than can be said of a nasal douche, or any other form of nasal medication. In these cases it is not my practice to give preliminary treatment in the way of local medication.

The operation can be performed with greater accuracy and in every way more satisfactorily under a local anæsthetic than by the aid of a general anæsthetic. For a number of years I have used cocain, 8 per cent., one part, I-1000 adrenalin or adnephrin, one part, and a solution of beta eucaine, 4 per cent., one part. This is freshly prepared

<sup>\*</sup>Written especially for this JOURNAL.

and is an almost ideal combination in its effects. Toxic symptoms are extremely rare; the parts can be thoroughly anæsthetized, and the operation under its use is practically bloodless. The anæsthetic is applied to the turbinate on pledgets of cotton packed around the structure, both on its septal and under surface by means of small angular forceps or a cotton carrier. It is here allowed to remain five minutes, when the pledgets are changed for fresh ones, the process being repeated at five-minute intervals, three or four times according to the sensitiveness of the tissus. The patient is then put in the operating chair, the body tilted well backward and raised sufficiently so that the operator can stand beside the patient looking somewhat downward into the nasal passages. A cotton swab saturated with the anæsthetic mixture is then carried into the nose. and the site of the proposed operation wiped rather vigorously. If the parts are at all sensitive when this is done, the process must be repeated until complete anæsthesia has taken place.

If the turbinal hypertrophy involves the bony structures as well as the soft tissues then a small angular saw is introduced beneath the turbinated body, between it and the outer wall of the nose, and the tissues sawed longitudinally from before backward until the bony structure has been separated. A pair of long, thin, angular scissors are next introduced, and the soft structures cut through. If there is a bulbous posterior hypertrophy it is not always easy to cut back far enough to completely remove this, so in this case a Wright snare with a small loop is passed over the severed portion of the turbinal and pushed back to the nasopharynx until the posterior hypertrophy has been encircled. The anterior portion of the severed part is then grasped with a pair of forceps, the posterior end cut off and the piece removed. It is well in any case to take hold of the anterior portion of the partially severed piece before fully completing the operation, otherwise it may fall back into the nasopharynx and cause the patient unpleasant choking and discomfort.

If the nasal passages are in a generally unhealthy state, the nose is thoroughly irrigated with an alkaline antiseptic solution, and the inferior meatus packed rather loosely with a strip of gauze ½ inch wide and from eight to twelve inches long, thoroughly smeared with calendulated vaseline. The patient is now allowed to go home if the residence is not away from the city, but is instructed to go immediately to bed and keep perfectly quiet for twenty-four hours. If the home is at

a distance or even an hour from the physician's office, it is good practice to send the patient to a convenient hospital, that absolute rest and care may be given for the twenty-four hour period. Since adopting this rule I have saved my patients and myself untold annoyance.

The reaction from the anæsthetic takes place in about an hour, and bleeding may become very troublesome unless the nose has been tightly packed, as must be done if the patient passes from the physician's immediate observation. If this has been necessary, although it may stop future hæmorrhage, yet it is productive of much pain in the nose, teeth and eyes, and tends to increase the slight rise of temperature which almost invariably follows the operation. In these cases, too, the hæmorrhage is much more severe upon removal of the dressing than when the nose has been loosely packed, and the patient put to bed. Unless there are definite indications to the contrary, the dressing is allowed to remain forty-eight hours, when it is removed as gently as possible, the nose thoroughly irrigated and the patient kept at the office until all bleeding has stopped spontaneously. It is rarely necessary to put in a second packing, because, as a rule, hæmorrhage does not recur after it has once stopped following the removal of the dressing. The patient should be given a douche solution to use morning and night (I think Dobell's answers the purpose better than and other, and is seen in three or four days, when if everything is progressing satisfactorily, a second observation at a week's interval will usually be found sufficient. It is needless to say that proper asepsis should be observed in the conduct of this operation. In ninetynine cases out of a hundred, if these directions are carefully followed, the patient will suffer the minimum of discomfort, there will be comparatively little lassitude and feeling of debility, and the results will be perfectly satisfactory to patient and physician alike.

Special methods of operation need not be described here. It goes without saying that there are cases where the usual procedure is not advisable, and some modification of it must be employed.

220 Clarendon St.

<sup>0., 0.</sup> and L. Society. The titles of papers announced for next September's meeting will be found on page xv of News and Business, among the advertisements.

### PRACTICAL HINTS.

Conducted by G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

High Myopia. Removal of the Lens. The writer has recently removed the lens in a case of high myopia (26 diopters) in a girl of twenty years. Before the operation primary vision was  $^2/_{200}$ , which, under correction, improved to  $^{20}/_{100}$ . The patient had been under his treatment for seven years, and in that period her myopia had increased nine diopters. There were opacities in the vitreous, and the visual image was much reduced. When reading or writing she would get as near to the paper as her nose would allow. Operation was by discission and linear extraction. Vision is now  $^{20}/_{50}$  with — 6. c. ax. 80. In writing she now is able to sit erect, and she states that it is like living in a new world.

Scurvy the Cause of Subperiosteal Haemorrhage of the Orbit. Dr. C. B. Meding, New York, reports two cases occurring in infants in the November number of Archives of Ophthalmology, 1905. One was seven and the other eleven months old, both had swelling over the lachrymal gland with exophthalmos, downward and outward, and both were emaciated, sallow and weak. One had a specific history. Both were improperly fed, and both recovered on being placed on a proper diet.

Strabismus Operations. Froelich says that in operations upon children a primarily good result may become an artificial divergence by reason of the often manifested tendency of strabismus to spontaneously disappear; that the orbits of childhood become remodelled in the process of development, and because the posterior section of the eyeball, the muscles and their insertions become changed in form and tension. An ideal result depends on strong antagonists and a sufficient power of vision in the squinting eye to secure a certain degree of binocular vision to act as the chief regulator of the position of the eye. A union of these two factors is more frequently obtained after an advancement than after a tenetomy.

Amblyopia From Squint. A five-year-old child with a marked strabismus of an amblyopic eye had the good eye covered with a celluloid shell for seven weeks. At the end of this period there was no loss of vision in the occluded eye, but vision in the squinting eye had improved from  $^{20}/_{20}$  to  $^{20}/_{50}$ . Hallett.

Zonular Cataract in the Newly-Born. According to Peters, quoted by Ed. Zirm in the Arch. of Ophth. for November, 1905, no case of zonular cataract has ever been reported as observed in the newly-born. He contends that such cataracts are developed after birth. caused cataracts by poisoning rabbits with napthalin. In these cases there was an increase of chlorides in the aqueous. In a woman of twenty-nine, who had repeated attacks of tetany convulsions after confinement, and died of nephritis after cataract had developed, a microscopic examination of the eyes showed the ciliary processes lined with a single layer of enlarged cells with hyaline degeneration of the protoplasm. He says the function of the protoplasm of the cells of the ciliary processes consists in the production of a nutritive fluid, for the osmotic supply of the lens, which is poorer in albumin and salts than the blood plasma. To rhachitis, as such, he attributes the significance of a predisposing factor only. The etiology of zonular cataract is thus an open question. He has observed zonular opacities to develop in four cases out of ten children suffering from tetany.

Hallett.

Transverse Ribbon-Shaped Corneal Opacity. Dr. J. W. Sherer, of Kansas City, Mo., read this paper, reporting a case in a man of 72 years, with a negative family history. He had had typhoid fever twenty years ago, with complete recovery. He had been rheumatic indefinitely. Vision had been keen until two years ago, when sight began to grow dim and the eyes felt scratchy. The eyes had never been painful. He walked slowly, with the lids wide open. There had been neither ataxia nor paresis found in the general or ocular musculature Tension was normal, and the eyes reacted normally to light and consensual tests. The pupils dilated equally under cocain. The media were clear except the corneæ. Each cornea presented a horizontal, grayish, granular opacity which extended entirely across the cornea and was separated from the limbus on either side by a narrow interval. The band of opacity was 3 mm. wide on the temporal side, 4 mm. wide on the nasal side, and 5 mm. wide over the pupil. Bilateral iridectomy was recommended and declined. The causative factor had probably been the low grade of chronic rheumatism present. had reported a case in a man who had suffered for years from rheumatism and renal calculi. Treatment should be directed to the diathesis, if one is present. Schiess had reported acase in which recovery had taken place upon a diet of raisins and cider. Kalt had reported a case in which he had removed a superficial opacity, involving the epithelial layer only, with the knife. Transparent epithelium would be developed safely in a few days. Cases of this nature were rare, only twentyseven having been collected by Manzutto.

The Influence of Nasal Obstruction on the Form of the Face. W. B. Parsons alludes to the great difference of opinion existing as to the

relation in cause and effect of the high-arched, narrow palate and nasal obstruction. The latter leads to the faces known as the "adenoid," but we may have the faces without adenoids; the latter without the former or both may co-exist. It is generally agreed that nasal obstruction is the cause of the deformity, but it is not generally recognized that so much of it as affects the maxilla is due to anterior nasal obstruction, that the lower jaw is not really, but only apparently affected, and that the deformity at the bridge of the nose alone is consequent upon posterior nasal obstruction. Variation in intranasal air pressure is potent enough cause when acting on mouldable bones, such as are found in the lymphatic, rickety, or other diatheses accompanied by malnutrition. The main point brought out by the author is that nasal obstruction, as related to the form of the face, depends upon the exact location of the obstruction. An anterior obstruction is at each inspiration productive of negative air pressure within the nasal chambers, and a corresponding increase of pressure on the outside of the face, while a posterior obstruction, that is, one situated in the nasopharynx, cannot exert any influence to diminish the air pressure in the nose and its accessory sinuses. On the contrary, this pressure is common with the general air pressure outside the nasopharynx (and if buccal respiration be also impeded outside the lungs) must become excessive, and its effect would be to depress the bridge of the nose, and to widen it. Finally, he notes that the adenoid operation is not always successful, so far as affecting the shape of the parts is concerned. Symptoms previously present may continue. They are often due to hypertrophic rhinitis. To this latter lesion is to be ascribed the persistence of the habit of mouth breathing after the adenoids have been removed. The evidence of this is often stamped on the face, and the attempt to overcome it is too often an unjustifiable harshness to the child.

Alypine, a New Local Anaesthetic. Alypine is primary tetra-methyldiamin-ethyl-dimethyl-benzoyl-carbinol hydrochloride. It occurs in well-formed crystals, which melt at 169° C., and, although non-hygroscopic, are very soluble in water. The aqueous solutions are neutral, and may be sterilized by boiling over a naked flame for five or six minutes; when heated for longer in an autoclave they become slightly acid, but may be restored to neutrality with sodium bicarbonate and retain their anæsthetic properties unimpaired. Aqueous solutions of alypine keep well. Alypine is easily absorbed by the mucous membrane and the subcutaneous tissue; no inflammation or necrosis have been observed to follow the injection of 4 or 5 per cent. solutions. Its anæsthetic action is equal to that of cocain, and, in extreme dilution, greater; while it occasions neither mydriasis, vaso-constriction, nor influences the accommodation, so that it is most serviceable in ophthalmic work as a substitute for cocain. Like stovaine, its toxicity is relatively very feeble compared with that of cocain. Complete anæsthesia of the

eye is obtained in sixty to sixty-five seconds by the application of a 1 or 2 per cent. solution.—E. Impens (Apoth. Zeit., 1905, 20, 589.) S.

Latent Disturbances of Equilibrium of the Eyes. A. Bielschonsky (Leipsic), ascertained from an investigation of about four hundred cases, that there is no higher percentage of disturbance of the vertical or horizontal equilibrium of the eyes in neuropathic than in healthy persons. The theory first advanced by 'American authors and advocated in Germany by Schoen, that such imbalance, particularly vertical, may give rise to various nervous diseases is untenable. Marked heterophoria is present in healthy persons who have no such troubles, so that A. von Graefe is right when he says that the absolute degree of the ocular disturbance is in no way proportionate to the asthenopic and nervous troubles, whether the latter arise from it or not. The dependence is rather on the working capacity of the organism, especially of the nervous system, which varies individually.

Operations Upon the Eyeball in the Presence of an Infected Conjunctival Sac. C. S. Bull (Trans. Amer. Ophth. Soc., 1904) advises a thorough microscopic and bacteriological examination of the contents of the conjunctival sac before operation in every case where there is suspicion of infection. If toxic germs are found in great numbers no operation should be undertaken until the sac is reasonably sterile. Operations are contra-indicated unless diseases of the lachrymal apparatus are previously treated. Bullar advises, when there is discharge from the lachrymal sac, that, just before operation for cataract, ligatures be placed around both canaliculi.

**Kali Iodatum.** Throbbing and a sensation of tightness at root of the nose, redness of mucous membrane of eyes, nose and throat. Discharge from the nose of greenish or yellow matter: involvement of the antra of Highmore and frontal sinuses. Syphilitic and scrofulous subjects. (Dr. Teets.)

Cataract From Tetany Convulsions. Dr. Ed. Zirm reports six such cases, giving a full history of each.

Hallett.

### BOOK REVIEWS.

REFRACTION: Including Muscle Imbalance and the Adjustment of Glasses. By ROYAL S. COPELAND, A. M., M. D., Professor in the University of Michigan, and ADOLPH E. IBERSHOFF, M. D., Instructor in the University of Michigan. 144 pages, illustrated. Cloth, \$1.50, net. Postage, 9 cents. Philadelphia: Boericke & Tafel. 1006.

In the whole of our thirty years' professional life we have not seen so satisfactory a book upon this subject. Although written for the student every general practitioner should read it—he or she would find no difficulty in readily comprehending this subject; it is too frequently confused with mathematics and illustrations, which suffer by comparison with many of these half-tones from photographs. The rays illustrating astigmia, for instance, are depicted as clearly as if they formed solid bodies. The language is simple, clear and not redundant.

The publishers' work, as usual, is above criticism, except that the high glaze of the paper necessary for such good illustrative effects dazzles the eye in the evening unless care be taken in holding the book.

"A toric surface is one which is shaped like the bowl of a spoon, i. e.. with one of the principal meridians more convex than the other. In the case of a spoon the meridian lying crosswise of the bowl is more convex than the meridian lying lengthwise of the bowl. The convex side of the bowl represents, crudely, a convex toric surface; the concave side. a concave toric surface." A toric lens is lighter than an ordinary flat one; has less spherical aberration; can be set closer to the eye, and—which the book fails to mention—affords a larger field of view with less astigmia distortion on looking through the periphery.

Our authors say nothing about scopolamin not increasing intraocular tension\* and the claim that it even reduces it. This unexplained anomaly seems worthy of careful study; we hope that in the next edition this action may be substantiated if not explained.

In this volume Helmholz's theory of accommodation, with Landolt's illustration, is given as the only one. While this is doubtless done in order to avoid confusion it seems that justice requires more up-to-date teaching.

We are glad to see stress laid upon the position of the optical centers and the proper tilting of near vision glasses. Looking

<sup>\*</sup>Journal of Ophthalmology, Otology and Laryngology, 1902, p. 379.

obliquely through a spherical glass converts it into a spherocylinder.

Our authors deserve special commendation for their adoption of the correct terms astigmia, astigmic instead of the hoary "astigmatism and astigmatic." This is the first text-book to take this position, and it is urgently hoped that other writers and teachers will now follow suit; it is easy, and no more than justice to the students.

NASAL SINUS SURGERY WITH OPERATIONS ON NOSE AND THROAT. By BEAMAN DOUGLASS. M. D., Professor of Diseases of the Nose and Throat in the New York Post-Graduate Medical School and Hospital. Illustrated with 68 full-page half-tone and colored plates. including nearly 100 figures. 256 pages. Bound in extra cloth. Price, \$2.50, net. F. A. Davis Company, Publishers, 1914-16 Cherry Street Philadelphia, Pa.

This beautifully gotten up book ranks with Whiting's Mastoid Operation and Worth on Squint. It has the advantage over the first of a handier size and smaller price. The illustrations are admirable, the language and arrangement very clear and concise. One of the many valuable points is that the dangers or objections to many if not

most of the operations and after-treatments are pointed out.

The author does not snare the faucial tonsil, preferring the Matthieu or Mackenzie tonsillitome; adding: "It is also possible in some cases to enucleate the entire tonsil, using a pair of blunt scissors." He has an assistant crowd the tonsil into the tonsillotome by pressure under the angle of the jaw, but says nothing of the danger of cutting an aberrant carotid artery. We feel safer to pull the tonsil into the tonsillotome's ring with Palmer's forceps. He amputates the uvula with a pair of straight scissors and mouth tooth forceps. General anæsthesia, he says, should always be used for post-nasal adenectomy, unless directly contra-indicated. Without an anæsthetic recurrences are more likely. His patient may be in the sitting or recumbent position.

FOOD AND DIET IN HEALTH AND DISEASE. By ROBERT F. WILLIAMS, M. A., M. D., Professor of Practice of Medicine in the Medical College of Virginia. 392 pages. Cloth, \$2.00, net. Lea Brothers &

Co., Philadelphia, 1906.

This practical book presents concisely the principles, as now known, underlying the intelligent use of food; technicalities have been avoided as far as possible so that it may be understood by the house mother. The last ten chapters consider dietaries for the various diseases and recipes, making the book particularly valuable to the trained nurse, both before and after graduation, and to the general practitioner. The individual foods are arranged as proteid, carbo-hydrate and fat, according to their predominating alimentary substance. The first three chapters treat of chemistry, physiology and cooking.

Baking powder consisting only of cream of tartar and soda is harm-

less, but if made with ammonium carbonate or alum, or if adulterated, continued use will be hurtful. Hot bread, fresh bread, is indigestible when and because the crumb when squeezed will remain a more or less solid mass.

Peas, beans and lentils, when dried, contain proteid sometimes exceeding that of meat, but it is not so digestible because it is enclosed by cellulose, which with fermentation to which they are prone, stimulates peristalsis. When simply boiled with their skins about 40 per cent. of their proteid is lost in the fæces; when ground into meal and made into purees only 8 to 10 per cent. escape; when eaten with other food an average of 85 per cent. of the proteid is absorbed. Removal of their skins lessens the flatulence.

Milk, although swallowed as a liquid, becomes a solid in the stomach. It is too often given as a matter of routine. When administered in typhoid the stools must be carefully watched for curds, which may be so fine as to be difficult to discover. From recent experiments it is claimed that lime salts ingested with milk increase the coagulability of the blood and the danger of thrombosis. Citrate of soda, 20 to 40 grains, to the pint, has been suggested as a better means of neutralizing the acids.

Gelatine is readily digestible, and is of undoubted value as a tissue sparer, lessening proteid waste; excess will cause diarrhoea and tympanites. When there is hæmorrhage it has been recommended in two to four dram doses of a preparation made by adding half to one dram

of commercial gelatine to one pint of water.

DISEASES OF THE SKIN, With Special Reference to Principles of Treatment. For Advanced Students and General Practitioners. By the late Henry M. Dearborn, M. D., Second Edition. Revised and enlarged, and edited by his son, Frederick M. Dearborn, A. B., M. D., Lecturer on Dermatology in two medical colleges. Dermatologist to four hospitals, etc. 655 pages, 134 illustrations, including 98 full-page half-tone photo-engravings. Cloth, \$6.00. Boericke & Runyon, New York, 1906.

Aside from the homoeopathic therapeutics this book compares favorably with all old school works on this subject that we have ever seen, and the addition of these resources makes it far outclass them. The condensed repertory for eczema fills two pages. In this edition the size of the page has been enlarged and the number of illustrations in-

creased by seventy.

The arrangement is simple, the style concise. Etiology, symptomatology and diagnosis are given more prominence than pathology, "because the latter is of the least importance in a work not designed for specialists," and, we may add, because that is best gone into in monographs.

In this edition the following new subjects are introduced: Radiotherapy, Phototherapy, High Tension and Frequency Currents, Becquerel Rays, Vibration and Mechanical Vibratory Massage, Monilethrix, Lepothrix, Tinea Nodosa, Roentgen Ray, Dermatitis, Dermatitis Gangrenosa, Varicose Ulcer, Atrophia, Cutis, Atrophia Senilis, Kraurosis Vulvæ, Echinococcus, Demodex Folliculorum, Dhobie Itch, Blastomycosis, Myringomycosis, Colchicum, Cuprum, Arsenicum and Fagopyrum.

The publishers have done their part well.

DISEASES OF CHILDREN. A Text-Book for the Use of Students and Practitioners of Medicine. By C. SIGMUND RAUE, M. D., Clinical Professor of Pædiatrics at Hahnemann College. Philadelphia, Pa. Visiting physician to the children's wards and chief to the children's clinic, Hahnemann Hospital. Pædiatrist to the West Philadelphia Hospital. Second Edition. Revised and enlarged. 61 illustrations Philadelphia. 776 pages. Cloth, \$5.00. Half morocco, \$6.00.

Boericke & Tafel, 1906.

After seven years the author has felt the need of revising some of his views expressed in the former edition; "he has learned the value of conservative methods and has endeavored to replace the mere possibilities of therapeutics with clinical certainties." The text has been entirely rewritten and new matter added when amplification is de-The chapter on infant feeding is practically new, is up-to-date and less complicated than many of the treatises on this subject. An excellent chapter upon diseases of the eye, ear, nose and throat has been added. Like the rest of the volume it is concise, clearly written and arranged. Alcohol, he writes, is well borne by young children; "aside from its sustaining action upon the heart it is a food in the sense that it is oxidized in the body and thus spares tissue waste." But we note that some of the latest authorities have come to the conclusion that the disadvantages of alcohol outweigh its advantages. Dr. Raue, we are surprised to learn, relies upon ignatia for the early stages of simple glandular hypertrophy of the faucial tonsils, "especially in those cases in which there is a constant recurrence of acute tonsillitis." He recognizes the efficacy of diphtheria antitoxin, but, unfortunately, fails to give the normal daily excretion of urea, phosphates, etc., in the urine at different ages.

A very practical, valuable text-book, rich in the author's personal experience. The illustrations are good, typography, paper and bind-

ing excellent.

MARRIAGE. By Jane Dearborn Mills (Mrs. James E. Mills), author of "Leaves From a Life Book of To-day" and "The Mother Artist." Philadelphia. The Nunc Licet Press, 1905. 82 pages. Price, 50 cents and postage.

Every earnest effort—and this is one—to study marriage, divorce

and the social evil deserves consideration.

The medical profession has a responsibility to the community in

these matters not second to that of the clergy, for its influence can permeate where our brothers of the cloth can not reach. This in addition to the influence that every living person exerts, even unconsciously, by the mere fact of his or her existence and activities or sloth.

In this beautifully gotten up little volume will be found ideas that are doubtless new to many, but which will well repay re-reading and

careful thought.

"The adult form of sexual vice is two-fold, that outside of marriage and that within its legal limits. \* \* \* The cause of the degrading notion that marriage is mere legalized sensuality is that its spiritual power is not known. The greatest value of any action, whatsoever. is in its spiritual, not its physical effects. The spiritual powers created by any acts are its results, more than the physical, for the latter pass out of our possession, but the others belong to us always. Love seeks, by its very nature, all possible modes of manifestation. It can not, without crippling itself, leave out of life its own peculiar language—caresses. The theory of marriage for mere physical procreation has grave defects and deficiencies. It surrounds with an atmosphere of filth the thought of the birth of all the innocent babies. It supposes the world to have been immersed for ages in a state so vile that if this had really been the character of marriage the race, if not by this time annihilated would be a monster of unmixed evil." "The object of marriage is the growing into one of all the best in the husband and the wife, growing of each, constantly, toward his or her highest possibilities. The aim for the 'oneness' is that it shall be a power for stimulating the highest possibilities of the race. In a marriage like this each delights to feed the angel in the other, starving out the self love by not administering to it." "Cherishing the spiritual power of any affection lessens the craving for its abnormal expres-\* It is the wife who must lead in this uplifting, for the woman is the guardian of the marriage; it is her perceptions which can find out its purity, and the way to it." "Our lives should be a service to fellow beings, and we intend to make them so. We are kind, when not too cross; helpful, when not too busy; unselfish, when not too much occupied with our own affairs; and in moments of contrition we scold ourselves for ever being too cross, busy or self-occupied. Examining our public and private benefactions it appears to us that nine-tenths of our 'service' has been a giving to some what they did not want, and to the rest what they ought not to have. Then we sit down in despair and wonder what is the matter with the golden rule. The matter is with our reading of it. Inspiring of others is the true service. It is the bestowal upon them of the Divine Life constantly flowing through one's character and forth to others. Constant elimination of evils is spiritual growing. Marriage is the condition in which this growth may be at its full height of conscious happiness. Each seeks the highest growth attainable, that each may abundantly bestow life upon the other. The spiritual children born of such a marriage

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are strong, deep-hearted forms of love and wisdom. By these the home becomes a center from which radiates neighborly love in peculiar strength and beauty. There are few such marriages as yet; this must be so until both men and women understand each other as they do not now. The way of cherishing harmony lies in the confidence of each in the quality of the other. The attaining of such understanding can not be a cold process of the intellect; it is love which makes one wise."

We are sorry the author did not omit her last chapter. Marriage Laws. That is specious pleading for divorce and remarriage which, it seems to us, is very pernicious. Marriage, as she says, is the upbuilding of character; mistaken marriages are permitted by Divine Providence because the problem thus presented is the very one whose tackling and surmounting in the right way is best for that individual's spiritual growth. If this is not possible without legal separation, the soul's problem may be to accept and make the best of this short part of life without remarrying during the life of his or her wife or husband The marriage vow is an oath to God "for better, for worse, until death us do part;" the only way God absolves that is by death. All other ways are by man, even when man claims authority to interfere. Ease of divorce is the greatest factor in the prevalence of hasty and lightly entered marriages. The family, not the individual, is the unit upon which is based the prosperity of the country.

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### INSTITUTE AND INTERNATIONAL CONGRESS.

203 Beacon St., Boston, Feb. 16, 1906.

Dear Doctor.

At a meeting of the Executive Committee of the American Institute of Homocopathy and the Special Committee of the International Homocopathic Congress, held in New York, January 31st, and February 1st, it was decided to hold the Congress, beginning Monday, the 10th of September, and ending Saturday the 15th. The Congress to be held in Atlantic City in accordance with the Institute's vote last June. It was also decided to open the Institute's sessions at three o'clock on Monday afternoon, September 10th, and to hold the preliminary meeting of the Congress on the same afternoon at four-thirty; to have the formal opening of the Congress on Monday evening, this meeting to be of a somewhat popular nature, as is the case with the opening meet-

ings of the Institute itself. The president of the Institute to have a conspicuous part in this meeting of the Congress. It was also decided to have the Institute's business sessions held daily from nine to ten; to give the time from ten to one o'clock daily to the Congress, and to ask the special societies to hold their sessions during the afternoons and evenings of the week, the Congress also to have afternoon and evening sessions.

It was decided to devote Tuesday to the discussion of the Principles and Propagandism of Homœopathy; Wednesday, to the stuy of Materia Medica (drug pathogenesy, provings, etc.); Thursday, to Clinical Medicine; Friday, to Pædiatrics and Sanitary Science; Saturday to be used for adjourned meetings and concluding exercises.

Dr. A. W. Bailey, of Atlantic City, representing the local committee of arrangements, attended the meeting, and promised to give ample accommodations to all the various committee, society, and Congress meetings as well as to furnish ample accommodations for all guests.

The outlook is exceedingly bright for an enthusiastic and successful Congress. It seems to me that all our journals should be kept informed of the plans that are being made, in order that the widest publicity may be obtained, and that a wide-spread interest in the Congress may be aroused.

Very truly yours.

J. P. SUTHERLAND.





### The Homoeopathic

## Ege, Ear and Throat Journal.

Vol. XIL

Lancaster, Pa., and New York, April, 1906.

No. 4.

### EDITORIAL.

THE REGULAR HOM COPATHIC MEDICAL SOCIETY.

PON another page (144) will be found an address which fails to justify itself. This, "The Regular Homoeopathic Medical Society [query—of the world?], proposes to restore homoeopathy to its logical place in the domain of medicine;" but it does not state how the restoration is to be accomplished, now that the International Hahnemannian Association, the American Institute of Homoeopathy, Dr. Bellows' reproving of belladonna, as well as all the publications and other organizations of our school have failed so ignominiously. We poor suburbanites in New York, Ann Arbor, Paris England, Germany, etc., must hasten and make pilgrimages to the newly discovered "center of the homoeopathic world," for instruction and salvation.

The intemperate attitude of our Chicago friends, and their appropriation of the designation "regular" after such strenuous opposition to the dominant school's assumption of that term, are suggestive of the Puritans before and after taking that voyage for their health.

We take issue with the assertion:—"It is a specious plea that homeopathy is limited in its action and consequently our students must be taught everything in medicine, but alas! the time has been too short for everything, so homeopathy is being crowded out."

Homoeopathy is limited in its action. Within its sphere its truth has been amply demonstrated; it is one of the laws of nature; but it is only a part of the practice of medicine, it is only a part of therapeutics.

Homœopathy comes into play only after the physician, surgeon or

other specialist has decided that the patient affords a case for the application of medicinal therapeutics.

It is a specialty—a specialty in therapeutics, as is electricity. In this, as in other specialties, there has naturally come about two classes of practitioners—the exclusivist and the specialist—and there is both ground and room for each. Men are differently constituted; some can not help rushing to extremes, but it is scarcely decorous for such to decry and vituperate the equally loyal, intelligent and sincere men whose world is not tinctured by constantly wearing the colored goggles of the exclusivist.

In all kindness we suggest that our friends modify this new title and take that of "The Society (or societies) of Homaopathic Exclusivists" as more accurate and less apt to invite antagonism.

This, however, is not all that we urge. Homoeopathy is the science of therapeutics, and it behooves those who would advance it to adopt scientific methods; the cardinal principle of all scientific research is thoroughness, self-criticism, modesty, control experiments, verifications, elimination of doubt, and avoidance of jumping to conclusions. Second only to the prescription in importance, if we would have the medical world adopt homoeopathy, is that each clinical report must be a demonstration and not merely an assertion.

Whether it be the verification of a symptom or the relief or cure of the patient—whether by medicine, surgery or any other means—every case should be so reported that the reader should be enabled, nay compelled, to agree with the diagnosis; should be apprised how long the condition had existed; how prompt, and how permanent, was the relief or the cure; and all adjuvants, all changes in the patient's environment, should be stated in order that the reader could estimate how much credit should be given the remedial agent.

Perhaps the greatest use of a medical society is discussion. It would be well to read clinical reports before societies without giving the name of the writer or the potency (if a drug was used) until after free criticism and a vote as to whether the thesis of the writer had been demonstrated.

MOFFAT.

<sup>0. 0.</sup> and L. Society. Additional titles for the program will be found on page xv. News and Business.

### PERICHONDRITIS AURICULÆ.\*

CHARLES DEADY, M. D.,

### New York.

NFLAMMATION of the cartilage of the auricle is a comparatively rare form of disease which receives slight consideration from some of the authorities, and by others is counfounded with othematoma. As a distinct variety of inflammation, however, which not only entails severe suffering but unless properly understood and appropriately treated early in its course, results in a serious deformity, it would seem that more attention should be directed to it than is commonly the case. The disease may be caused by traumatism, especially from a contused wound, but in the majority of cases is either idiopathic or secondary to some inflammatory condition of the meatus auditorius externus, as in furuncle of the meatus, or in cases of suppurative otitis media where a very acrid discharge has set up severe irritation of the canal. The affection has also been known to follow an operation for mastoid disease. It is probable that cases of perichondritis are sometimes diagnosed as phlegmonous inflammation of the auricle, as no case of phelgmonous disease can exist for any great period of time without involving the perichondrium, and cases which are in the early stages classed as phelgmon would later on be more correctly termed perichondritis; however, a differential point which is of some value is that while in perichondritis the inflammation involves the whole auricle except the lobule, in phlegmon the lobule may also be involved.

The disease under consideration may be mistaken for hæmatoma. from which, however, it differs in the gradual development with inflammatory symptoms, and in the nature of its contents, which resemble synovial fluid or consist of purulent material, but are not, as in hæmaturia, sanguineous in character. In the later stages of hæmaturia, however, this method of differentiation fails us, as the contents of the tumor sometimes change to a transparent, syrupy fluid much resembling the secretion in perichondritis, and no blood may be present.

In the idiopathic form of the disease, sharp, shooting, continuous

<sup>\*</sup>Written expressly for the Homogopathic Eye, Ear and Throat Journal.

pain may be the first symptom, and this may continue for some days without appreciable change in the appearance of the auricle. In other cases the disease begins with heat and dusky redness of the part. gradually increasing to severe pain. This is soon followed by swelling, which is greatest on the anterior surface of the auricle, obliterating its natural folds and depressions, and sometimes closing the external meatus.

The tumefaction is not usually uniform throughout the whole surface of the organ; certain points are more severely affected, and here the swelling is greatest, and the presence of fluid will soon become evident. Many times the auricle increases to enormous size. The normal relations of the parts are greatly disturbed by the distortion produced by the diffuse inflammation of the perichondrium, which proceeds rapidly to the formation of abscess. As soon as any fluctuation can be detected, the part must be incised at once; if allowed to go on without surgical assistance several spontaneous openings may appear, and as a result of the delay, the probe will reveal necrosis of the cartilage.

The posterior surface of the auricle may become involved, and large abscesses may form in this situation. The contained fluid is at first serous, but often becomes quickly purulent. Sometimes instead of pus a dark, yellowish-brown, sticky substance appears, and may persist for a considerable time.

When perichondritis is secondary to an inflammatory condition of the external auditory canal, the symptoms of the primary disease are first much exaggerated, and this condition of exacerbation is followed by the local symptoms and conditions found in the idiopathic form. The part affected in secondary disease depends much upon the location of the primary affection in the auditory canal, as the disease here spreads by contiguity of structure. If the primary inflammation involves only the anterior wall of the canal the resulting perichondritis may sometimes be confined to the tragus alone, but when the posterior and superior walls are affected the secondary process is usually very extensive and causes much deformity. The disease is slow and almost always of long duration, entailing in a large majority of the cases considerable distortion of the parts and in many cases results in great deformity. The various anatomical divisions of the auricle may be attacked in succession, and may be so changed as to be unrecognizable. At times the disease attacks the same spots repeatedly. until the natural depressions are entirely obliterated and the organ anpears more like a growth or excrescence than a human ear. Calcareous and cheesy degenerations may also occur, but throughout the whole process in most cases the lobule, containing no cartilage, escapes with very little injury.

In severe cases, from whatever cause, necrosis of the cartilage may ensue and the formation of sinuses may take place. Rarely the necrosed cartilage may break down, detach itself and have to be removed; the meatus may become contracted, and in a few cases ossification of the cartilage has occurred.

The best possible result is recovery after an abscess and discharge of synovial fluid mixed with pus and blood with no resultant deformity.

TREATMENT.—In the early stages iced cloths should be applied and such medicines as belladonna, ferrum phos., agaricus, etc., may be useful. As soon as any sign of pus appears the part should be incised, well curetted with a sharp spoon, afterward packing the cavity with gauze and bandaging firmly. Several incisions may be made, and by threading them with gauze, as is shown in the cut, the drainage is perfect.

If the disease is taken in the early stage and the above treatment vigorously carried out, it is quite possible that it may be aborted. Bishop reported that his best results were obtained by injecting after incision and removal of fluid, equal parts of iodine and water or alcohol and applying pressure with cotton and bandage.

Sinuses that may form should be slit up and all granulation tissue carefully scraped away. Kuhn states that massage has rendered him more service than puncture or injection, and recommends its use in preference to other methods of treatment.

Aspiration of the fluid is not admissible because of its usual purulent character.

In the late stages of the disease where there is much deformity, hard or prominent pieces of the cartilage may be removed with much improvement in the appearance of the part.

A case of the disease reported by Schwartze is thus described:\*
"First noticed two small swellings side by side on the edge of the ear.
They were thought to be the bites of an insect. The parts were soft and with little sensation or redness. In a few days the two swellings merged into one, which was filled with fluid. It was lanced and opened

<sup>\*</sup>Knapp's Archives of Otology, Vol. XIX., p. 45.

daily for a time, then healed, leaving the swelling the same. In a month or two the part began to swell very rapidly, and to an enormous size, grew red, hard, heavy and very painful. It was again lanced with the discharge of much pus, and after being poulticed for a time finally returned to the condition before the appearance of the abscess. ear felt solid but quite soft. After some time it began to harden, and in six months was as hard as a rock. During the following winter a fur cap caused so much pain he could not wear it." The description of the ear at this time is as follows: "Hearing good; auricle thickened and contracted, with irregular elevations and depressions. A cylindrical swelling extended from the upper anterior part of the pinna transversely backward, and then curved down, corresponding to the antihelix, but filling also the fossa of the helix. It felt hard like wood, and could not be bent in any direction. There was a certain rigidity also in the other parts of the auricle except the lobule, which has ordinary consistence." Diagnosed as ossification of the auricle, and the ridge in upper and posterior parts removed by operation.

Dr. J. B. McMahon† reports two cases, the first of which, due to abrasion from a fall, had a large swelling involving the entire anterior surface except the lobule. There was no pain. The swelling was worst over the concha. There was a smaller posterior swelling over the lower part of the auricle. Incision was made and the contents evacuated with the sharp spoon, followed by drainage, poulticing and another spooning. Case lasted from November 29th to the end of January.

The second case was first seen November 2d. Had had severe pain in left ear for two days, and a swelling like a furuncle in the lower part of the meatus. The tumor was incised November 8th. The incision had healed, swelling worse, pain severe. Another free incision, and another on November 14th. November 29th a distinct picture of perichondritis. Anteriorly, a swelling filling out the concha; posteriorly and below, an oblong swelling with indistinct fluctuation. Objection was made to another incision, and on December 5th it opened spontaneously. Cocain was injected, and the sharp spoon used with drainage tube and a firm bandage. This was repeated December 6th and 7th. On December 11th an incision was made over the concha, and after scraping the cavity a silver tube was passed downward and backward, projecting slightly beyond the posterior opening. December

<sup>†</sup>Loc. cit., Vol. XIX., p. 20.

13th, sponged out and tube reinserted. December 16th, tube replaced by some strands of silk. December 23d, moderate discharge of pus. Silk removed. December 25th, nitrate of silver applied to the walls of the cavity. December 28th, entirely healed, some swelling over concha; compress and firm bandage all the time.

Pomerov‡ reports case of John Scully, æt. 42; had had violent pain in right ear for eleven days, when abscess opened spontaneously with discharge of a large quantity of thick, creamy pus, but no relief of the pain. After a month a polypus in the external meatus was removed and furuncles in the meatus were incised. At the end of a second month the swelling increased rapidly, extending from the concha over the whole auricle, increasing its size by three times. On September 1st (nearly four months from inception) there was a large abscess in the region of the concha extending upward, downward and backward. In front of the meatus, near the tragus, there was a circumscribed swelling with a fistulous opening at the apex. The large tumor was nodulated, but with fluctuation both anteriorly and posteriorly. An incision was made posteriorly, and 5 3 of pus removed. By passing in the finger the cartilage was found to be destroyed in the region of the abscess, so that its walls consisted only of integument and connective tissue. Subsequently small abscesses appeared as follows: One in the tragus, two in the superior part of the helix, and three in the region of the lobule. The main abscess closed in three weeks without treatment. A weak solution of carbolic acid was first used, but it caused aggravation, and was stopped, and the cavity was syringed daily with tepid water. The patient was two months in recovering. trauma, no insanity, nothing to account for the symptoms.

In the New York Medical Record of 1892, Vol. 41, page 148. Dr. Thos. R. Pooley reports a case of this disease affecting both ears simultaneously. Mary G. æt. 22, presented July 30, 1891, with furcles in both ears. The patient was poorly, nourished and anæmic because of bad teeth. After four weeks of treatment there was a constant recurrence of furuncles and a diffuse swelling of the external auditory canal. On incision, the furuncles discharged thin, bad smelling pus. At this time she was taken into the hospital. Hot applications, generous diet, iron and quinine and stimulants were prescribed with temporary relief of the pain but no reduction of the swelling.

In a few days the left concha bulged out, and three days later the

Transactions American Otological Society, 1875, p. 84.

right was in the same condition. After that the course was the same in both ears, but worse in character in the left. The swelling in the canal diminished, but from the concha the swelling successively invaded by slow extension the entire surface of the auricle except the lobule, involving in turn the concha, helix, antihelix and fossa helicis. The character of the swelling was uneven, in some places diffuse, in others nodular.

When at the height of its course on the anterior surface the disease began to encroach on the posterior surface of the organ, the whole of which became affected. The swelling was darkened in color, and boggy to the feel, with an ill-defined sense of fluctuating most mark ed on the posterior part of the auricle just above the lobule. At this point an incision was made in both ears. A small quantity of thin, glairy looking matter, mixed with yellowish-white shreds, was discharged; there was no blood. The treatment consisted of injections through the incisions of solutions of hydrargyrum bichloride and carbolic acid and almost constant heat and pressure. By October 12th the inflammation had entirely subsided, leaving the usual deformity. This case was idiopathic in origin, there being no history of trauma.

The writer's case entered the New York Ophthalmic Hospital December 13, 1901, with the following history:

Eliza V. P., æt. 54. Disease began in middle of October last with stinging pain in the right auditory canal, and later there was a discharge from the canal, probably due to furuncle, but canal was too thoroughly closed by swelling to decide this matter at any time while the case was under observation. Later the discharge ceased spontaneously, and this occurred before there was any swelling of the auricle.

In a few days after the cessation of the discharge severe pain began, which she described as being "all over the inside of the canal." The ear now began to swell outside, and this continued until the canal was closed. She then went to one of the large eye and ear hospitals of the opposite school for treatment. Here the ear was lanced three times and she was then sent home.

When first seen by the writer, December 13, 1901, the ear was enormously swollen and exceedingly painful. The helix, antihelix. concha, tragus, antitragus, in fact, everything except the tip of the lobule was bulged out of all likeness to its normal shape. The canal was closed by swelling, and a thin, yellowish pus oozed from a very

small crease at its former site. The case was cleansed with H<sub>2</sub>O<sub>2</sub> constantly, and hepar, apis, rhus, agaricus and other remedies were given as indicated. The progress was very slow. After a time slight fluctuation indicated the presence of fluid. This fluctuation was greatest over the former position of the antihelix in the spot indicated in the cut. Two large incisions were made, connecting under the skin, and a dark mixture, apparently of pus and blood, was discharged. A strip of gauze was inserted through both incisions as a seton, the cavity frequently cleansed with bichloride solution 1-2000, and the seton was



changed daily. After this the pain rapidly subsided; nothing but hepar was given, and the progress was rapid.

The inflammation subsided completely, but as might have been expected in a case where there was no treatment for so long a time after the inception of the disease, there was extreme deformity of the organ, which never changed in shape from the time the writer first saw it. The annexed cut is an excellent picture of the ear about two weeks after the incisions were made.

151 West 73d Street.

### BLENORRHŒA OF THE LACHRYMAL SAC.

EDGAR J. GEORGE, M. D.,

### Chicago.

O much has been said and written of blenorrhoea of the lach-rymal sac that I fear that I have but little to add to the subject; however, I have endeavored to gather facts and principles with perhaps a few observations of my own that may add something, or at least bring forth an exchange of ideas, for it is admitted that the result obtained from the treatment of this disease is often disappointing.

The first manifestation is epiphora, a more or less constant symptom, with aggravation on exposure to cold or winds, and, if of long standing, distention of the lachrymal sac ensues.

Inflammation of the lachrymal sac is often the cause of conjunctivitis and keratitis, but rarely the reverse occurs. This statement is borne out by the fact that an infection of the sac during an attack of gonorrhoeal conjunctivitis has never been known, although gonococci must enter in numbers. Taking this into consideration, the etiological factor must be considered primarily in the nares.

For a better understanding it is necessary to briefly touch upon the anatomy of the lachrymal canal. The lachrymal sac and nasal duct are one, the former being an expansion of the latter. Fuchs says: "At the spot where the cleft of the lachrymal bone merges into the bony canal the lachrymal sac passes into the nasal duct." and adds. "the point where this transition occurs constitutes the narrowest part of the whole lachrymal channel, and is, therefore, especially liable to the formation of pathological contractions."

The walls of the lachrymal sac consist of a fibro-elastic coat, while the walls of the nasal duct partake of a character of both mucous and periosteal membrane and are surrounded near the nasal orifice by a dense plexus of veins, resembling the venous plexuses of the turbinated bodies, mentioned by Henle as compressible cavernous tissue. Rud<sup>2</sup>-

mentary valves or folds of mucous membrane are described existing near the upper and lower extremities.

In the majority of cases the beginning of the disease is in the nares when not due to congenital absence or faulty formation of the bony canal. Of the former I have seen but one case. In consideration of the fact that the lining membrane of the lachrymo-nasal duct is an extension of and similar in character to that of the nares, it is prone to be more or less affected and influenced by acute or chronic, catarrhal. syphilitic, and, in rare instances, tubercular inflammations of the nose. In an acute attack of coryza the venous plexus surrounding the lining membrane of the canal becomes more or less engorged and the mucous membrane swollen. The engorgement and swelling may be sufficient to cause temporary closure of the duct, and frequent prolonged attacks lead in time to chronic hypertrophy of the mucous, submucous and periosteal tissues with engorgement of the venous plexus. The walls of the veins also change, they become thickened and lose their elasticity, and as they surround the nasal end the lumen of the canal is more or less stenosed by this pathological condition. At the same time the tissues of the upper end take on a fibrous character, frequently associated with periosteal and osteal thickening, that results in a fibrous or bony stricture, although the latter is rare. Chronic nasal affections of inherited or acquired syphilis are especially likely to involve the lachrymal apparatus. Other causes of blenorrhœa of the lachrymal sac are blows on the bridge of the nose or about the inner angle of the eve, syphilitic caries of the nasal bones resulting in the sinking of the bridge of the nose, nasal tumors and the formation of crusts in atrophic or syphilitic rhinitis.

After a watery eye has persisted for a period of several months or years, the lachrymal sac becomes noticeably distended. By pressure on the distended sac, its contents may be emptied by a discharge of a viscid fluid of whitish, yellowish or greenish character through the puncta into the conjunctival sac, or into the nose, but in a few hours there is a recurrence of the former condition. Microscopical examinations of the discharge reveal numerous micro-organisms, virulently infective, so much so that when the discharge comes in contact with wounds or corneal abrasions purulent infections speedily occurs.

Occasionally infants are born with dacryocystitis, or it occurs a few weeks after birth. The youngest case of this form that I have seen developed the third day after birth on the right side and ten days later

on the left. Degenerative exudation beneath crusts of atrophic and syphilitic rhinitis can be the means of an infection by extension without the presence of a stricture.

An acute dacryocystitis may also follow traumatism and infection from the passage of probes. Care and rigid asepsis and antisepsis in this respect should be observed. If left to itself the abscess usually ruptures externally, although in a few rare cases the lachrymal bone has been perforated and the pus escaped into the nose. Pus has been known to burrow in other directions beneath the tissues. I once attended a case of orbital cellulitis occurring as a result of neglect. The spot where the pus breaks through, externally, does not always correspond with the position of the sac. It may burrow a considerable distance below and to the outer side on account of the skin being attached to the margin of the bone by rather dense connective tissue. The farther the pus burrows below the sac the longer will a fistulous canal remain.

As to treatment, I believe in an early incision into and the cleansing of the sac before the pus has an opportunity to burrow beneath the tissues. Strips of gauze inserted into the incision are recommended for drainage, but I am partial to the sterilized suture gut for the purpose. Several strands can be doubled or twisted together to a suitable size and inserted without difficulty or pain to the patient. It soon softens from the moisture and is easily removed. The lessening of the tension and the evacuation of the contents afford immediate relief and subsidence of the inflammation. As soon as possible following the subsidence of inflammation natural drainage should be established by the reduction of the stricture.

If the stenosis is due to simple engorgement, thickening, or fibrous contraction, there will be very little difficulty in dilating with graduated probes. Should there be bony obstructions, malformation, or congenital absence of the canal, there will be more or less trouble in overcoming the difficulty.

The treatment of chronic blenorrhoea of the lachrymal sac is directed toward relief of the existing stenosis or strictures situated in the lachrymo-nasal duct. There seems to be quite a difference of opinion in regard to what extent dilatation should be carried. It is evident that Powman fell short as to the size of his probes, the largest being No. 8, or 2 mm. in diameter. Theobald evidently took into consideration the average diameter of the bony canal when he ran them up to

16, or 4 mm. Aside from lacerating or wounding of the tissues, I believe the failure of cures in many cases is due to insufficient dilatation. The extent of dilatation should depend upon the size of the bony canal and the density of the stricture, which usually can be determined during the course of the operation. Over-distention of the nasal duct is likely to allow the forcing of air into the conjunctival sac on blowing the nose; although not harmful it is rather disagreeable to the patient.

For the past six years I have used electrolysis exclusively with excellent results, both in my private and clinical practice. My probes are of the Bowman pattern ranging in size from Nos. 5 to 14. Each probe is supplied with a shoulder and socket to fit the tip of a galvanobattery cord and should be attached to the negative pole. The positive pole is supplied with a sponge to be held in the hand or placed on the cheek opposite to the side treated. It is important that the point of the probes be conical in order that they enter and dilate the constriction gradually. Most of the probes on the market have rounded ends, and because of their blustness efter injure or tear the tissue.

In the beginning of a transfer the part sould be well anæsthetized by the injection of a special and adrenalin into the sac through the punctum. After the equalipulus is alit and the first probe is passed, the injection should be repeated. In dilating I begin with a No. 5 probe, as a smaller one is more likely to puncture the tissues. As soon as the probe is in the Richard to the vertical position and has entered the upper extremity of the lachrymal sac, I turn on two milliamperes of current, and gradually force the probe into the sac. At the upper end of the sac considerable contraction is often met with, which in time generally relaxes under the influence of electrolysis, as well as other constricted parts of the canal that the electrolized probe comes in contact with. It is customary to incise the constriction at the head of the sac, but this is not necessary if electrolysis is used. An incision at this point should be avoided, if possible. as it destroys the original tone and condition of the canal. At the juncture of the sac and nasal duct fibrous strictures of more or less density are generally encountered. It is here that care must be exercised in entering the stricture without causing laceration of the tissues.

In the beginning of the treatment of a case the canal should be dilated two or three times a week, and not carried beyon 1 a No. 8 probe. After the traumatic inflammation has subsided the sizes are to

be gradually increased, a too radical dilatation frequently causing an acute traumatic inflammation. A 2 per cent. carbolized gum tragacanth paste makes an excellent lubricant. Vaseline is a non-conductor and less tenacious, therefore is undesirable.

The best results are obtained from the use of the larger sized probes. They not only thoroughly dilate the stricture, but have a marked influence on the reduction of the venous engorgements. Dilatation should not be carried to the point of destruction of the mucous folds or rudimentary valves. Our failures may be due to the fact that we do not dilate sufficiently or continue the treatment long enough.

The influence of the negative pole on cicatricial tissue is one of softening, liquefaction and disintegration. The current should be mild and not exceed two or three milliamperes for the smaller probes, larger ones having a greater resistance require four to five. After entering the canal each probe ought to remain in place a few seconds only as the negative pole is irritating and will cause ulceration of the tissues. Dilatation by electrolysis seems more agreeable and not so painful as the older method, although sometimes it is necessary to use quite a little force to penetrate a firm stricture. The relaxation of the tissues and the beneficial results are not observed so much in the beginning of the treatment as afterwards. In ten days or two weeks a marked change will be noticed in the size of the canal and softness and the pliability of the tissues. After dilating it is always well to wash out the sac and duct with some mild antiseptic or astringent solution and collyria of similar preparations are beneficial for home use.

The use of canulas and styles have long since been discarded as antiquated measures; in fact, I never use them.

In obstinate cases the destruction or extirpation of the lachrymal sac may be warranted and resorted to in order to relieve the constant danger of abscess and infection of other parts. Extirpation has been both popular and unpopular at various times. It is not considered a safe operation on account of the danger of suppuration from infection which is likely to extend to other parts. "The obliteration by chemicals such as caustic alkalies and strong acids is not advisable, as their action is too violent and often destroys more tissue than intended." Alt recommends cauterizing the sac thoroughly with stick silver nitrate: after which it is packed with gauze. The galvano-cautery applied in the same manner is also effective. The results are not so dangerous as extirpation, suppurative and orbital cellulitis being less frequent.

Another method for incurable cases is to slit open the upper and lower canaliculus and divide the tissues between into one cavity. This being kept open converts the sac into an open space which the patient can be taught to cleanse by the frequent use of the syringe.

The mechanical treatment described in this paper comprises but a small part of the treatment required to effect a cure in this affection; would time permit I would like to cite many cases which have yielded promptly to our homeopathic remedies where the local treatment alone has failed.

801 Marshall Field Building.

### DISCUSSION.

J. M. HINSON: To my mind the vital part of this paper is that portion relating to electrolysis in the treatment of obstruction and stricture of the lachrymal tract. I have had absolutely no experience with electricity in these conditions; for this lack of experience I suppose one would naturally be expected to give some reason or excuse. My reasons are:

1st. My experience in the treatment of these cases has been very satisfactory with the older methods.

2d. I have had no convincing evidence from the experience of

others that electrolysis is superior to these older methods.

3d. The technique of operative procedure is practically the same as without electricity, and the question arises as to what part of the

credit is due to electrolysis.

The doctor states that the etiological factor in inflammation of the lachrymal sac must be considered to be primarily in the nares. From my earliest experience with lachrymal inflammations I have felt convinced of this fact and have directed my attention and treatment to the nares and post-nasal space in these conditions. In the treatment of pus formation and abscess of the sac my first endeavor is to enter the sac by way of the canaliculus with a flexible shanked knife, passing it on through the sac into the nose, following this with the largest sized probe possible.

In this way I have frequently been able to successfully combat the trouble without an external incision, even in cases in which the ab-

scess apparently was about to rupture.

If I am unable to enter the sac by way of the canaliculus, I incise the sac not at the most dependent portion, but at some distance above the bottom of the pus cavity, making an incision of about 5 mm.

Usually by the second day after evacuating the pus sac I am able to pass a knife through by way of the canaliculus, followed by a large sized probe. As soon as this is accomplished I allow the external

wound to close. I have treated many cases in this way and thus far without a fistula.

In the treatment of chronic blenorrhoea from stenosis, or stricture, after using cocain and adrenalin. I dilate the canaliculus, pass a probe and endeavor to locate the site of the constriction. I then pass the canaliculus knife into the sac down through the duct into the nose, rotate and withdraw. If I feel that this has accomplished the desired results in dividing the strictured area, I proceed to pass large probes. If these fail of easy introduction I make use of a flexible long shanked knife, of which I have two sizes. One of these knives is passed through the canal in one position and withdrawn in another, thus dividing the strictures. Frequently you feel the stricture tissue yield, and occasionally hear it snap as the knife severs it. It is always my endeavor to pass a No 14 probe, and a No. 12 will, as a rule, pass readily.

I suppose it is hardly necessary to emphasize the doctor's remark in regard to the "conical point," as I judge all probes of later date have

the conical end.

The doctor states that dilatation should not be carried to the point of destruction of the mucous folds or rudimentary valves. If the doctor can determine where this point is I heartily acknowledge his

superior skill.

As to the styles and canulas: The temporary use of the style I have found of some service. The canula I have never employed. In regard to extirpation of the lachrymal sac, I am merely a theorist. My experience with this operation is limited to the observation of one by Ne tleship ten years ago. If called upon to perform the operation I should endeavor to dilate the sac by some substance, paraffin for instance, and tie off each end. If this could be accomplished I can see no reason for complications from infection occurring here any more

than in operations elsewhere.

I. C. Soule: I use the same method as that described by Dr. George, but I do not carry the size of my electrolytic probes quite so far as he does. I have replaced my silver probes by copper ones, and I think that I get better results. In electrolysis the current dissolves the copper in minute quantity and cupric oxide is deposited in the tissues. It has a decided action in the direction of improving the case. If the probe is properly insulated so that only the point is exposed you do not have to use any force at all in getting the probe through. If much force has to be used, I should regard that as an evidence that the probe was not properly insulated. By this treatment the stricture is literally Some have spoken to me as though they had trouble in insulating their probes. It is very easy; I use a common shellac varnish for the purpose. It is a very strong solution of the gum in alcohol. I cover the tip of the probe with sealing wax and then dip the whole probe in the shellac solution and then allow it to dry. varnish is dry you bake it by running it quickly through an alcohol flame: it will bubble up and melt. When cool, wipe off the bubbles

with clean cloth, and dip once more into the shellac. When dry this second time it is ready for use. I have had such an insulation last for a dozen applications. After I have passed a No. 4 or 5 probe I insert a silkworm gut suture. It does not need any guide because it is stiff enough and is as easy to insert as a silver probe. I can make a close knot with it, cutting the ends close off. I instruct the patient to turn that suture round every night.

I wash out the sac the next day. This treatment has given me good success except where there is pressure over the middle turbinated body. This pressing on the bony canal, which is very thin in part of its extent positively occludes it; I had one case of that kind which had been treated by many without results; I removed the anterior third of the middle turbinated body and the sac got well of itself.

DAVID W. WELLS: The criticism of Dr. Hinson that he doubts the value of the galvanic current because he has never seen any evidence that it is better than the old method is a just criticism if as much force is used in introducing the probe electrode as in introducing the ordinary probe without the current.

I have always felt that the only proper way to make use of electricity in such cases is with an insulated probe. If I am obliged to use any force to get the probe through the canal I feel that I am not getting the proper effect, and look to it that the insulation is perfect. In other words, we should not claim to be using electricity at all unless the probe works its way through the tissues without any force being used at all. Dr. George says that styles are antiquated and out of date. but I know that Dr. L. Webster Fox, of Philadelphia, is using them with, he claims, great success. The styles must be of proper length, reaching to the floor of the nose but not touching it. They are made of aluminum; I have secured a set of them and intend to make a trial of that treatment. I understand that surgeons in operations for webbed fingers make use of lead to put through the web at first, as more likely to prevent the growing together again of the parts. We cannot say that styles are antiquated for they have been proved to be a very effective method of treatment when of the right length, of the proper size and used in this way.

J. A. CAMPBELL: For many years I have made use of a small velvet cork to stick the point into and then cover the rest of the probe with shellac; I can in this way regulate the exact distance that I want the point of the probe uncovered with the shellac.

SECRETARY WELLS: I do the same thing exactly.

Dr. George: I do not think anything that I have said in my paper as to dilatation can be interpreted as being radical. The extent of dilatation depends upon the density of the stricture. As to the matter of insulation. I do not insulate my probes because the negative pole does not attack the healthy tissue of the canal as it does the cicatrix, and because I want the effect of the electricity along the entire canal.

I cannot see the necessity of insulation. I am treating a case in my clinic at the present time where the canaliculus had been slit but slightly; by taking a little time I am now able to pass a No. 8 or 9 probe without having to slit the canaliculus up any farther. The ideal treat-

ment is not to disturb the canaliculus any more than possible.

In my paper, you will remember, I said that the benefit of electrolysis is not noticeable at first, but after a week or ten days you will find the tissues, and especially the cicatricial tissue of the canal, soft and more pliable. My preference is for silver probes because they are soft and can be bent to any curve. I have been more successful since I have been careful in passing the probe by taking pains to follow the course of the canal and being careful not to tear or lacerate the tissues at the point of stricture. Cases that have not done well under treatment I have found to be due to my own fault in this respect.

What was said in discussion about the copper oxide being carried cataphorically into the tissues applies also to the use of silver probes when attached to the positive pole. I wish to emphasize that the nega-

tive pole should always be used in the canal.

SEC. WELLS: Dr. George says that the electric current has no effect upon the healthy tissue; I do not understand the subject in that way. If the probe is not insulated the current is all dissipated before it reaches the point where you want it.

DR. GEORGE: It relaxes the normal tissues the entire length of the canal and dissolves the cicatricial tissue of the stricture, thus increasing

calibre.

Dr. Soule: Certainly you get a dissolving action.

DR. GEORGE: I only know that I have had better results by using electrolysis, as I have described, in combination with the passage of probes.

PRESIDENT COPELAND: How long do you allow the probe to remain? DR. GEORGE: Only a few seconds, as a rule, using judgment; insert the probe carefully, and as it enters the canal immediately turn on the current; after the probe reaches the nasal meatus allow the current to be on twenty to thirty seconds.

HERBERT D. SCHENCK: Dr. Boynton recently told me that he had used for a long time past the positive pole in the canal where there was suppurative inflammation of the lachrymal sac. He applies the positive current for a few moments and then reverses the current and loosens the electrode with the negative. I have not tried it, but he claims it is very successful.

## CONGENITAL INTERSTITIAL KERATITIS AND GLIOMA.

## ALICE VIRGINIA DUFFIELD, M. D.,

## Chicago, Ill.

T is not the intention of the writer to go into the etiology, pathology, etc., of the two conditions named in the title of this paper, but merely to bring before the society a very interesting and rare case for discussion.

Fuchs says that cases of congenital non-inflammatory keratitis are rare, and usually accompany other congenital anomalies, as coloboma, but that cases of congenital inflammatory keratitis are still more rare, and the writer has certainly had great difficulty in finding anything on the subject.

August 9, 1904, an infant daughter was born to a young German couple, the father being 24 and the mother about 20 years of age. The father was slender and delicate looking, but no specific history of previous ill health of any kind could be obtained by the physician, Dr. de Tarnowsky, who sent me the case. The mother was stout and healthy in appearance, but gave the history of having at the third month of pregnancy what was said to be tuberculosis of the skin, which cleared up readily under remedies. The diagnosis is greatly doubted and was made by a physician whose name I did not learn.

Eight hours after birth it was discovered that the cornea of the left eye of the baby was perfectly white. As there were several abrasions of the skin below and to the temporal side of the eye, the family doctor thought that the eye also had been injured by the use of the forceps.

On the third day, August 12, I was called to see the case. Both lids were thickened, especially the upper, the palbebral and ocular conjunctiva deeply congested and there was great ciliary injection. The whole cornea was bulging and densely opaque, with two porcelain-like streaks of greater density, one extending entirely across the cornea from above down on the nasal edge of the pupil, and the other

extending from the middle of the upper edge of the cornea down to the upper edge of the pupil. There was no discharge and but slight photophobia. There was no abrasion of the lids, the conjunctiva or the cornea and no ecchymosis.

I decided that the instrumental delivery had nothing to do with the case, but that the inflammation was deep seated and of some duration. Adrenalin chloride was applied, and being careful to hold the punctum lachrymalis, I dropped in sulphate of atropin, 4 grains to the ounce of water, and left a prescription for sulphate of atropin, 2 grains to the ounce of water, ordered hot applications and a pressure bandage, giving mercurius dulcis internally.

Two or three days later the child broke out with an eczema, which cleared quickly under arsenicum iodide.

August 14 the cornea showed the first signs of clearing at the temporal side, and two weeks later, August 29, was entirely clear, with the exception of two porcelain like streaks, which were less dense. At this time it could be seen that the iris was dilated perfectly, that there were no synechiæ and that the lens was clear. The staphyloma also was decreased. However, considerable ciliary injection still remained. Protonuclein special powder was given for local nutrition, the pressure bandage and atropin continued.

By the latter part of September all inflammation had apparently ceased and the cornea shortly afterward returned to its normal position. Accordingly, atropin was omitted, but the pressure bandage continued until it was thought the cornea sufficiently strong to maintain its integrity. Hoping to clear up the two streaks, calomel powder was used for several weeks, and acted so well that one streak disappeared entirely and the other on the nasal edge of the pupil became the faintest nebula, which could be seen only in certain positions.

After working with calomel through October and concluding that nothing more could be done for the child, I dismissed the case November 4 with the upper lid still thickened and drooping and the nebula on the cornea. Two other oculists in the same suite who had watched the case from the beginning, thought the result fine. The parents were more than pleased.

The ophthalmoscopic examination was, of course, exceedingly difficult, as all must know who have tried to examine the fundus of a wriggling piece of humanity but a few weeks old. Every attempt to open the eye was followed by the baby promptly trying to close it, and consequently eversion of both lids, thus obscuring the cornea. Besides, it was a dangerous thing to throw a strong light into the inflamed eye of a helpless babe. However, after the eye became less sensitive, I had several snap shots, sufficient to give me a good, red reflex from different directions and occasionally a good view of the fundus; also an opportunity to see that the cornea and lens were perfectly clear, with the exception of the nebula.

Instinctively I felt anxious about the eye, and before dismissing the case, told the mother to return in two months, even if everything appeared to be all right, or sooner if she saw any change. Accordingly, January 4, 1905, the baby, now five months old, was brought back with the assurance that the eye had been "all right and as good as the other." The sight was then tested in every way possible in so young a patient, and it was found with the good eye bandaged that objects brought from the back would attract baby's attention if held in any direction, proving conclusively that the vision was certainly fair and probably good.

About five weeks later. February 10, the mother brought the child to my office, saying that she had noticed something peculiar in the baby's eye for a week. Examination showed no conjunctivitis, no ciliary injection, no change in the color of the iris, but the tension slightly elevated, the cornea filled with small opacities irregularly arranged, mydriasis with abundant synechiæ, although the free portion of iris was very mobile, slight opacity of the lens, and a grayish-white mass close behind the lens and to the nasal side, the eye being totally blind.

In view of the history of the case, the question arose as to whether the tumor was a glioma or pseudo-glioma, as no blood vessels could be seen, and the two other oculists mentioned differed with me as to the tension. When enucleation was suggested, a kind friend of the family, calling himself a physician, urged taking the child to some one else. The parents, however, told me of it, and asked for a consultation with Dr. Fisher, which, of course, followed. We examined the case together several times and at last put the baby under chloroform. The increased tension then came out clearly. Enucleation was strongly urged, and February 25 I removed the eye. A large piece of the optic nerve was cut off for miscroscopical examination, but unfortunately was lost. It must be remembered that this is one of the cases in which the optic nerve should be cut as far back as possible, although, as in this case, a profuse hæmorrhage may follow. Considerable

ordema of both lids persisted for nearly three weeks, which is believed due to straining from a severe case of whooping cough, which developed two days after the operation. The child was teething also. Otherwise the eye recovered nicely.

Section of the eye revealed a tumor starting in the ciliary region, umbrella detachment of the retina and involvement of the lens. The microscopical examination of the tumor showed "Small mononuclear cells closely packed and imbedded in a fibrous sfroma containing thinwalled blood vessels." The diagnosis of glioma was no longer a question.

March 20, at the locality of the optic foramen, I saw what appeared to be a white slough, but it washed out and nothing came of it, and everything seemed to be in good condition June 21, the last time I examined the eye. Nothing abnormal could ever be found in the right eye, which was carefully examined several times.

These tumors appear in children only, and develop before the 10th or 12th year. They recur in about 87 per cent. of the cases and generally grow back along the optic nerve, and thence to the brain, or they may appear in the other eye, or by metastasis in any part of the body, generally the liver.

The reason the tumor was not discovered earlier was no doubt due to the fact that it was anterior to the field of the ohthalmoscope. Was this glioma congenital? Was the congenital keratitis part of the malignant process? Why did the ciliary injection cease and the eye remain in an apparently normal condition for over two months, with the degenerative process still going on, and later a cyclitis, keratitis, quiet iritis and involvement of the lens set in?

The long continued ciliary injection seems probably due to the activity of the growth in that locality, which would point to congenital origin. You will remember that when the case was dismissed no inflammatory symptoms could be seen, and both cornea and lens were perfectly clear, with the exception of the nebula mentioned.

100 State street.

#### DISCUSSION.

R. S. COPELAND: This subject is an interesting one to me and has been entertainingly presented. I am inclined to think that the two diseases in the case related were two separate and distinct things.

independent of each other, even though they occurred in the same patient. It is a question whether glioma is a different affection from the small-celled sarcoma.

DAVID W. WELLS: I would like to inquire how common glioma is in the experience of those present; personally, I have never seen a case in my own practice. I have seen one in consultation; a baby in whom a double glioma necessitated the enucleation of both eyes. I would like to know whether it is the lot of others here to see many of them or not.

R. S. COPELAND: When I was house surgeon I assisted the attending oculist in enucleating an eye; the patient was a little child with glioma. Seven or eight years ago I enucleated the eye of a sister of that patient; and more recently enucleated the eye of a brother for glioma. Three or four other cases are all that I have had in my experience. Two or three years ago Dr. Ball and I presented a paper on the subject to this society, with specimens. It is an interesting condition and deserving of discussion.

W. B. Kreider: At the time Drs. Copeland and Ball presented that paper, I related a case of glioma which had been enucleated several years previous; the patient is now fourteen years old and there has

been no recurrence. That was the only case in my experience.

ISAAC C. SOULE: In regard to interstitial keratitis, which disease was a part of this case related by Dr. Duffield, I have had an interesting case that I have been able to follow continuously for fifteen years. When I first saw the disease the patient was ten days old. For thirteen years there was an anual attack of keratitis in spite of everything that I could do to prevent it. For the last two years it has escaped. I should like to know whether anybody here has had a similar experience.

A VOICE: Is there any refractive error?

DR. SOULE: Yes, as I remember it, there is a myopia in one eye of 22 diopters and 21 in the other, with about 7 diopters of astigmia. I think I have prevented recurrence twice by the use of a compression bandage, galvanism and protonuclein. I know of nothing more efficacious in treating a bad case of keratitis than protonuclein, with direct corneal massage; not only is it good for the acute inflammation, but it also relieves the leucoma that is apt to follow. There is one caution to be observed, however; it will not act in the presence of iodine, or of any of the mercurial preparations. You may use calomel, for instance, one day and then by flushing the eye to get all of the mercurial salt out use the protonuclein the next day.

DR. DUFFIELD: In answer to Dr. Wells' question, I will say that glioma is a rare condition. I have learned on inquiry that a number of specialists have never seen a case. It happens that I have seen four cases, but this is the only one that I have ever had in my own practice. Keratitis of specific origin is apt to recur, but there was no such

history in this case. The mother may also have had tuberculosis, which would account for the congenital condition. It was unfortunate that when the child returned in January that I did not dilate the pupil and examine the fundus. Probably if I had done so I would have found the glioma at that time. In the early stage of these tumors the tension is either normal or minus; the tumors are usually white or yellow. Recently I saw one of a decidedly brick-red color.

DR. COPELAND: Did you ever observe the golden reflex?

J. M. PATTERSON: Were those cases of Dr. Copeland's malignant? Are they alive yet?

DR. COPELAND: Two of them are living; one is dead.

DR. DUFFIELD: It is common to have several cases of glioma in the same family.

0. 0. and L. Society. Additional titles for September's program will

be found on page xv of News and Business.

Transient Attacks of Dim Vision or of blindness, frequently recurring, and lasting from a few seconds to half an hour, constitute a very important symptom of cerebral—most frequently in cerebellar—tumors. It may be due to interference with the blood supply of the occipital lobe, to temporary strangulation of the nerve, to increased intracranial pressure or to pressure upon the chiasma by the infundibulum.

Of seven cases of frontal tumor three retained normal visual acuity throughout; in another vision fell to  $^6/_{18}$ , but ultimately recovered perfectly. In the remaining three operated upon the sight of the eye on the side corresponding to the tumor was badly affected, while the

other eye was left normal.

Of the ten cases of parietal tumor four retained good sight throughout; three suffered a definite loss during the attack, but subsequently recovered, and in three the sight was entirely and permanently lost.

Tuberculosis Spread by Flies. Dr. F. T. Lord, by feeding flies on tuberculous sputum. has found that the bacilli increased in number in almost wonderful proportions, and that the bacilli were deposited by the flies. The bacilli examined were found also to be much larger than those on the sputum, and showed evidence of branching. Guinea pigs were inoculated with the excreta from the flies, and tuberculosis was produced in three animals inoculated, showing that virulent bacilli were present in the excreta for fifteen days.

Dr. Lord concludes that fly marks contaminated by tubercle bacilli may be a source of tuberculosis in man for at least fifteen days after their deposit, if exposed only to the daylight. He observed that flies readily feed on tuberculous sputum even when other food is accessible. If they afterwards alight on food they may deposit tubercle bacilli in great numbers. It follows that flies should not be allowed access to

the sputum of consumptive patients.

# SUBCONJUNCTIVAL MEDICATION.

G. DE WAYNE HALLETT, M. D.,

Surgeon to N. Y. Ophthalmic Hospital. Ophthalmic Surgeon to Hahnemann Hospital, N. Y.

O the June number, 1904, of the Homoeopathic Eye, Ear and Throat Journal I contributed an article on Dionin, Cyanide of Mercury, Acoin in Ophthalmic Practice, and from a large number of patients reported nine cases from private and hospital practice in which the particular treatment employed had been used regularly for a sufficient period and with carefully noted conditions of disease, progress, vision and dosage to enable some conclusions to be drawn as to the results of the drug or method.

Six cases were of the drug used by instillation or for conditions not now pertinent, and while the results were interesting, they do not come under the scope of this paper. When used singly there is no advantage in using dionin subconjunctivally. The bichloride, oxygranate, and cyanide of mercury, and saccharinate of sodium, with which drugs this paper will deal, must be administered in that way.

The inter-communicating lymphatic spaces of the eye lend themselves admirably to this method of treatment.

further report on the cases included in the above mentioned paper, in which the subconjunctival method was used, would seem to be in order, and this opportunity is taken to fulfill a promise made at that time.

consisting the cyclitis of two months' standing. There were ciliary injection, some photophobia and lachrymation, slightly dilated pupil, tension aqueous hazy and deposits on the posterior surface of the cornea. The vitreous was clear and vision 20/80. The cyanide, 1-2000, given by subconjunctival injections about nine times, 3 minims time, and at four-day intervals, when the test showed normal pupils, no redness, tension normal, aqueous and vitreous clear, vision and spots nearly gone from Descemet's membrane. This result

was very satisfactory and after some weeks longer the patient discontinued treatment by my advice. Three months ago she returned and complained of "spots" before that eye. Examination showed a vision still  $^{20}/_{15}$  and none of the old symptoms. A new condition was present, however, in the form of numerous hair-like opacities in the anterior portion of the vitreous. At the present writing she is on the same treatment and presents the same symptoms.

OLD CASE SEVEN—was Frank Elsworth, a boatman, 26 years old. He had had an interstitial keratitis for five weeks. His symptoms were excessive photophobia and lachrymation, one-third of the cornea infiltrated and the epithelium exfoliated. Dionin was instilled for three weeks without result. Eight or nine injections of cyanide, 1-2000, at intervals of three to seven days, gave immediate effect. First the photophobia and lachrymation ceased, then the epithelium reformed. Finally, and after the publication of my paper, the cornea cleared of infiltrate. Since that time this patient has had a similar condition in the other eye, which responded to similar treatment.

OLD CASE EIGHT.—Dorothy M., aged 30 years. interstitial keratitis for six months when I first saw her. trate spread up from the lower edge in radiating lines and dots and involved about one-half of the cornea. There was no vascularity. but the epithelium was lost. Photophobia, lachrymation and ciliary injection slight. There was a specific history and good evidence of a similar affection in the other eye at the age of thirteen. This case was very much like that of Elsworth, except for the lesser degree of photophobia and lachrymation. She had nine treatments of cyanide and during the three weeks of that treatment the balance of the cornea became also involved. Cyanide was thereupon discontinued and 5 per cent. dionin ointment prescribed, a mass size of a pea to be placed in the conjunctival sac every other night. After a month she was given a solution which was 5 per cent. dionin and ½ per cent. eserin, one drop at night, and this treatment was continued for eight months. During its early use the cornea began to clear at the region of first involvement and continued to clear till all haziness had disappeared. She now has a vision of 20/15 and at one time she could only count fingers at two feet. At her age this is a remarkable result.

Since my previous paper I have used cyanide in many cases experimentally and empirically, a few of which I will mention.

CASE ONE.—Miss F. D. H., chronic iridocyclitis. This case has

been under my care, with several consultations, for two and one-half years. By careful management—and, perhaps, fortunate circumstance—some pupillary area has been kept clear. Vision was first  $^{20}/_{30}$ , at times it was as low as F. /3 ft., and it is now  $^{20}/_{40}$ . Her eye has gone through all the familiar phases incident to such a diseased process. The point I wish to make in her case is, however, that during the most painful periods, subconjunctival injections of cyanide would largely abate the pain for about three days. That it modified the process I am not able to say. Possibly normal salt solution would have done just as well or better.

CASE Two.—Mrs. W. M. P. High myopia, opacities in the vitreous and posterior staphyloma affecting the tunics in the macular region. With this there was a deep-seated aching in the eye. This case was one of several similar ones in which injection of cyanide or bichloride was followed by entire relief of the aching. No other effect was observed.

Case Three.—J. B. Traumatic irido-cyclitis, a general uveitis. This was a young man who for about six weeks while in the hospital ward had a violent inflammation, with intense photophobia, lachrymation and blepharospasm. When the lids were opened a great gush of tears would follow. Every form of treatment proved unavailing. All the latter symptoms subsided upon a single subconjunctival injection of cyanide, and a prompt subsidence of the inflammation followed. I doubt if any solution other than one of mercury would have accomplished this effect.

CASE FOUR.—Mrs. Jones. Specific neuroretinitis; a very marked case, with large exudate and numerous hæmorrhages. Cyanide used over a long period of time was without effect. Two other cases of this disease gave the same results, both to cyanide and bichloride. Dionin has also failed to ameliorate these cases.

Case Five.—Mrs. C. J. W., 42 years. Both eyes previously and equally good. Interstitial keratitis starting near the limbus of the cornea of one eye, with a circumscribed haziness, having a ground-glass appearance by reason of losing its epithelium. Into this and through the deeper layers of the cornea a number of parallel blood vessels were developed. Other areas of haziness formed about the cornea and just in front of them and further toward the centre of the cornea would appear one or more minute dots. To each dot could be seen under a magnifying glass, and in the course of a couple of

days, a very fine line of haze. These dots would, in a week or so, develop into larger areas by their own increase of size and a spreading out of the hazy line, to be followed by a further encroachment of dots and new blood vessels. This case was seen and treated frequently for six months and cyanide injections were given for three months, then mercurial inunctions at intervals for two months, and then cyanide again for two months. For the last six months she has had no cyanide, her treatment being atropin and attention to her general health. The process has been subsiding gradually for some eight months. The present condition is one of maculæ of the cornea, passing to which two minute blood vessels can be observed. Vision was at first  $^{20}/_{70}$ , at the acme of the process  $^{10}/_{200}$ , and is now <sup>20</sup>/<sub>200</sub>. The duration of this has been, in all, thirteen months. I cannot be sure that evanide contributed, materially, to shorten or limit its progress. It was really given in addition to other treatment, and because of its good effects in old case seven. The theory of thoroughly asepticising the whole lymphatic territory in which the morbid process has lodged itself is very alluring.

CASE SIX.—Miss H. B., 58 years. Compound hyperopic astigmia, with opacities in each vitreous, but especially in the right eye. No defects of the fundus could be observed. Her principal symptom that had to do with the vitreous opacities was that for several months, both when sewing and in the street, the sight would "go away." For two months she received dionin, 5 per cent., and for the following two months sodium saccharinate (gr. X. 3j), both by the hypodermic method. Vision remained throughout at  $^{20}/_{50}$  +, and I could see no change in the opacities. The patient asserted, however, that she could see clearer, that the "sight never went away" any more and that she no longer had the "dreadful headaches" back of her eyes. If, in this case, I take the patient's word for the effect, I am still at a loss to assign the method or the medicament of the treatment as the cause.

These are only a few of the many cases in which I have used this method of treatment, but they represent good examples of the various morbid states in which my practice has allowed me to exhibit it.

There are other conditions in which I hope to try it when they present themselves.

In the last year and a half I have used dionin in 46 cases, cyanide in 17, saccharinate of sodium in 6, bichloride in 17 and oxycyanate of

mercury in one. I believe that in cases of interstitial keratitis, post-operative and traumatic infections, cyclitis, iridocyclitis, hypopion, central choroiditis with myopia and opacities in the vitreous, and scleritis, I should feel that I had not done my full duty to the patient if I failed to use mercury by the subconjunctival method and in the form of cyanide or oxycyanate.

The manner of making the injections is as follows: The conjunctiva is rendered anæsthetic with cocain, a speculum to hold the lids open and forceps to steady the conjunctiva at the point of piercing are advocated by some writers, but I find it more agreeable to dispense with every instrument not absolutely necessary. As a rule, I make an entry through the conjunctiva I cm. above the cornea or near the inferior cul-de-sac. The syringe should be aseptic, and the quantity of solution from five to twenty minims. With the normal salt or sodium saccharinate a large quantity up to 20 c. c. may be used. The resultant bleb seldom lasts over an hour, and the irritation is but slight, little or none with salt or saccharinate solution.

Most of my patients have gone to their homes from the office or clinic without any protective dressing, but occasionally it is well to apply one for a few hours. In case of pain they are directed to apply heat. No ill results have ever been observed.

Wherever this method is used the results should be carefully observed and subjected to comparison and criticism with the results obtained by other procedures.

Governed by the character of the case injections should be made at intervals of from four to seven days.

Darier believes in the specific action of the different substances used, and that they promote an acceleration of fluid change. Others find perfect satisfaction with the local stimulation theory and therefore use only salt solution.

L. Webster Fox favors sodium saccharinate (gr. x. @ 3). claiming for it absence of irritation and ready absorption.

With this claim I can agree, but I do not know that its effect upon diseased processes is greater than other solutions. The experiments of Dr. Karl Wessely (London Lancet, April 4, 1903), are of interest. He used subconjunctival injections of salt solution in rabbits. He concludes that these injections do not act through their osmotic power upon the internal humors of the eye, analyses having proved their penetrating power to be small, that their effect is not lympha-

gogue, nor by any direct action in setting free leucocytes so far as regards salt solutions. They really act as powerful local stimuli to the conjunctiva. The nerves of the conjunctiva, thus stimulated, act in a reflex manner, presumably through the vaso-motor nerves in the vessels of the adjoining vascular territory, leading to dilatation of the ciliary area. The result is the secretion of aqueous humor containing much more albumin, in place of the normal aqueous, which contains none. The beneficial effects are believed to be due to the presence of ferments, enzymes or solvents eliminated and carried with the albumin. Experiments showed that normal aqueous had no power to dissolve bovine blood corpuscles, and hence contain no hæmolysin. Aqueous drawn off a half hour after a 5 to 10 per cent. salt solution had been injected in the conjunctiva would quickly dissolve an equal volume of a 5 per cent. mixture of blood corpuscles, and that the power of solution in the newly secreted aqueous was in direct proportion to the amount of albumin therein contained.

128 West 85th St., New York City.

#### DISCUSSION.

DAVID W. WELLS: Dr. Hallett says "the theory of thoroughly asepticising the whole lymphatic territory in which the morbid process has lodged itself is very alluring."

In this I am in hearty sympathy, and I confess that I took up subconjunctival medication two years ago with considerable faith and

enthusiasm.

Following Darier's direction, I added one dram acoin to two drams of merc. cyanide, 1-1000, and my first few cases did not experience much pain.

I did not see any severe or lasting reaction, but with most patients the pain was so severe that I have not felt justified in continuing its use; in fact. I doubt if my patients would submit to repeated injections.

The solution used was 1-1500, and of this I have seldom succeeded in injecting more than one dram, frequently only a few drops. I have not tried weaker solutions. I note that Dr. Hallett uses 1-2000 and 1-3000, and that this does not cause much pain. I am "allured" to try again with the merc. cvanide in weaker solution.

In the fall of '03 I read Bull's paper on the "Present Status of Subconjunctival Injections." in which he said: "I have found this solution (merc. cyanide) very painful to the patient, even when cocain or acoin was added to the solution." and as he used 1-5000 I assumed that Darier's statement of the painlessness was not trustworthy.

About this same time I visited L. Webster Fox, of Philadelphia, and found him injecting soda saccharinate, 15 grains to the ounce, in a variety of conditions, including uveitis and vitreous opacities, and as this is not accomplished by any severe pain, I have since then used it instead of merc. cyanide in about a dozen cases of vitreous and corneal opacities, but not in very active keratitis.

I am very glad to learn of the analgesic action of merc. cyanide, as I have under treatment two very intractable cases of sclerosing keratitis, which have had periods of relapse and exacerbation for a year or more. One of these has recently developed marked photo-

phobia.

I find it very difficult to decide about the value of sodium saccharinate injections. In case 5.281 (female, age 20), which started as an episcleritis and later involved the cornea with considerable reduction in vision, it seemed to work like magic, both in clearing cornea and increasing visual acuity. This case had been under my care for six months, the sclerosing process creeping up from below till it nearly covered the pupillary area. At time of first injection, V = .6, after ten days with three injections, vision was normal, cornea clear, except leucoma 1x3 mm. just below center of pupil. Four more injections were given without appreciable result.

In case No. 3,625 (female, age 42), of choroiditis, limited to one lesion about half a disc diameter, with hazy vitreous (V = .1). After six injections at weekly intervals vision was normal, though the opthalmoscope shows the retina and choroid atrophic over the site of the lesion, which is slightly to the temporal side of the disc.

In case No. 5,078 (female, age 22), of diffuse vitreous opacities with no discoverable choroidal lesion, vision improved from .4 to .9 + after six weeks with nine injections, with entire clearing of vitreous. Later there followed a relapse, and although twelve more injections have been given, vision is now sub-normal, viz., .7—, shreds and

web-like opacities still present.

In case No. 5.619 (male, æt. 39), uveitis. I advised its use, but patient decided to consult some one else before submitting to any treatment. Dr. Hasket Derby, of Boston, strongly recommended "interrupted current after the method of Von Reuss." Several months later I met the patient on the street, and in answer to my inquiry he said he had done nothing, as the other oculist and I advised such different treatment. Vision had become reduced to fingers at 2 feet. and the disc could not be made out. I told him what Fox claimed for the injections, and at his request sent him to Fox, who strongly advised this method, and gave good prognosis. I made twelve injections at intervals of five to seven days, without any improvement in vision. A painless plastic iritis developed between visits, and there remains one posterior synechia which no amount of dionin and atropin will detach. Injections were discontinued for six weeks and "mixed treat-

ment" with inunctions used. After this the case began to improve. Since then I have given six injections, with marked gain in vision, which is now .2. This case has had dionin and hydrarg. cyanide, collyria, merc. bin, hydrarg. c. cretæ. inunctions of hydrarg. oxid. flav., and k. i.; in fact, all of my cases have had other medication, which I realize reduces their value for statistical purposes.

The other cases have had so few treatments that they are hardly of evidential value. I do not expect any clearing of well marked leucomata, but I do think that the intervening haziness will frequently clear under dionin, subconjunctival injections and medication, if taken

at the right time.

The essayist is to be congratulated on the results of the nine cases reported, but I wish he would tell us about the other 32 of the 41 treated. The percentage of good results is what we want to know.

In this connection I want to report a case of sudden blindness in a patient sixty years old, No. 6,324, vision fingers at two feet. The vitreous was loaded with large, floating masses, no fundus reflex. I diagnosed hæmorrhage and gave guarded prognosis. I sent the case back to her physician for urinalysis and blood analysis, and general physical examination; gave merc. cor. 3x—4t., with instructions to return in a week for subconjunctival injections. The physical examination was negative, and what was my surprise to find at the end of a week the vitreous simply hazy, fundus details fairly clear, V=.2. Very naturally continued mer. cor. It has never before been my good fortune to see such a rapid recovery from this condition and I should like to know the experience of the members. What a glorious triumph this would have been had I used subconjunctival medication on first visit!

To me the lesson is plain. Nothing short of a critical study of a large series of cases can establish the value of any therapeutic interference. However, I feel convinced of the value of this means of treatment, and I fully agree with the essayist in the statement that "I should feel that I had not done my whole duty to the patient if I failed to use subconjunctival injections of merc. cyanide in interstitial keratitis, post-operative and traumatic infections, cyclitis, iridocyclitis, hypopion, central choroiditis, with myopia and opacities."

With regard to technique, no instruments but the syringe, which should be aseptic, are necessary. I use a platinum needle, which I sterilize in an alcohol flame. Of sodium saccharinate I use one to two drams, inject slowly, giving the solution time to completely surround the cornea, forming a large bleb. I keep the patient in a prone position for five minutes and send him home with a piece of cotton tucked under his spectacles. Puncture is made three or four mm. from cornea, and I endeavor to find a new place each time.

THOMAS M. STEWART: The title of the paper, "Subconjunctival Medication," excludes the discussion of "sub-cutaneous medication,"

an equally important method of treatment for the consideration of the oculist.

This form of using medicines in the eye has been before the ocular world for a great many years; it has won many friends among those who have used it. It has made many enemies for itself among those who have used it limitedly or inexactly.

Dufour insists that not more than eight successive injections should be made; and he also insists upon the necessity of absolute rest after

the injection with at least two days' bandaging.

Senn is emphatically in favor of the method, and considers that it will banish the cautery in corneal ulcers, as well as eliminate panophthal-

mitis as a result of ulcus serpens.

Wessely has shown that the remedies used enter the anterior chamber, but in so small a degree that they cannot be considered as antiseptics. He thinks the effective factor consists of an irritation in the ciliary body, the same as we know to occur spontaneously to counteract disease.

Dianoux refers to two methods, viz., the subconjunctival injection of a solution of sugar for detached retina, and the injection of 2 to 4 cc. of sterilized filtered air in tubercular keratitis and episcleritis.

Darier extols the effectiveness of the subconjunctival hetol injections in scrofula and tuberculosis, as well as gelatin injections in detachment of retina.

The foregoing investigators speak after an experience with from

500 to 5.000 cases.

Calderara, of Siena, has treated thirty-five cases of hypopion keratitis in different stages of the affection with the sera of Tizzoni-Panichi and Romer. The method of procedure was first to wash out the conjunctival sac with a solution of bichloride of mercury. I-1000, to prevent reinfection by organisms not affected by the specific. One-half of a hypodermic syringe of the serum was injected into the conjunctiva every day, according to the severity of the symptoms, and every two hours the serum was instilled into the conjunctival sac. In severe cases sub-cutaneous injections were made into the loins and thighs.

Rollet, of Lyons, uses in keratitis of hereditary syphilis saturated

solution of methyl blue and biodized oil of mercury.

Koller has discarded the ordinary method of instillation of cocain for the subconjunctival injection in all operations upon deeper eye structures. He uses a 5 per cent. solution and injects two or three drops at the point of intended fixation with the forceps; a wet compress is applied to the eye for 5 or 6 minutes. Dilatation of the pupil indicates that the drug has penetrated the iris, and any operation performed at the time is entirely devoid of pain.

Subconjunctival medication has a restricted use, and those entitled to an opinion give us its range as follows: Interstitial keratitis, herpes cornæ, infectious corneal ulcers, ulcus serpens with hypopion, iridocyclitis with vitreous opacities, scleritis, post-operative infec-

tions and syphilitic eye infections.

CHAS. S. RUMSEY: I have been using subconjunctival medication for about three years and on the whole I am disappointed in the results. I have not found it valuable for choroiditis or for diseases of the vitreous humor. It seems to be helpful in irido-scleritis; the applications were painful; I used cyanide of mercury, I in 1,000 and I in 5,000; both were painful.

Dr. Wells: Did you use any cocain or acoin in the solution?

Dr. Rumsey: No; but I used cocain previously to the subconjunctival injection. The injection of the salt solution seemed to be less painful. My technique is about the same as that described by Dr. Wells. I would like to ask how near together his injections were.

Dr. Wells: Two days to a week, depending upon the nature of

H. D. SCHENCK: I have seen cases which mercurius corrosivus has cleared up as rapidly as that mentioned by Dr. Wells. I have wit-

nessed excellent results in similar cases from that medicine.

Dr Soule: I would like to ask Dr. Hallett if he has had any experience with this method in cases of opacities of the cornea following ulceration? The reason I ask is because I have a case on hand now, in which there is a heavy opacity on the cornea; it is the result of using a ten per cent, solution of silver instead of a ten grain to the ounce solution. I have hesitated about trying it, not being sure of the result. Still I have been tempted to use the salt solution.

R. S. COPELAND: I think that this method of medication was in use

ten years ago; it was used in episcleritis with good results.

W. B. Kreider: Where I can dilate the pupil I use normal salt

solution with good results.

G. DEWAYNE HALLETT: I would say that in all of my cases I have used but one substance at a time. I did not employ them combined. because that would not allow me to place the credit or the blame. The only case in which two drugs were used at the same time was where it was necessary to use atropin. Dr. Wells asks about the other thirty-two cases. I do not report them because many of them were hospital cases and could not be followed up. When the treatment was new to me I wanted to know what it would do and tried it on many cases, partly for the opportunity of observing physiological The results that are of value are all included in this report so far as I know. In each of them it seemed to me that there was a lesson to be learned; sometimes because they were benefited and sometimes because they were not. I cannot answer Dr. Soulé's question, because I have never used this treatment in those conditions. Copeland spoke of episcleritis; my experience in that trouble is limited to two cases. Both of them were seen early and a mercurial solution used in both. The injections were made through the area of irritation. The progress of the disease was very much shortened by it.

## PRACTICAL HINTS.

Conducted by

G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

Optic Neuritis From Quinine. The writer has in his clinic a man who has taken on his own initiative nine grains of quinine daily for one year, and during the previous year five grains every other day. In each eye there is a marked optic neuritis. There is no specific history, the kidneys are healthy, and there exists no other apparent cause for the neuritis. The writer can not find any other such case reported. Quinine amblyopia and contracted fields are freely reported. H.

Deviation of One Eye Above Its Fellow. This condition is often found by the writer, and is the cause of much asthenopia. When of considerable degree and in the very young, it is the cause of divergence, and, if neglected, more or less amblyopia in the deviating eye. Frequent testing and full correction by prisms incorporated with lenses is the proper treatment. If a divergence has developed it must afterward be the recipient of muscle exercise, which will cure the lesser

The location of adequate writings on the tendency of one eye to deviate above its fellow is not known to the writer.

H.

A Slightly Congested Eye. This is often presented for treatment. and may be a part of various conditions, refractive and otherwise. Frequently a patient will not accept the suggestions of treatment for that which may be the underlying cause, or, if it be refractive, will not or does not wear the constant correction necessary. From whatever the cause we are often obliged to prescribe a make-shift in the form of a collyrium, and for such conditions the writer has found the following to answer many requirements; from it one or more of its component parts may be excluded according to the individual case:

B. Sol. witch hazel distil., 3ij. Sol. adrenalin chlor., 3ss. Cocain hydrochlor., gr. i. Argyrol, gr. v.

Sol. boroglyceride in aquæ ros., 5 % ad. 3ij.

Cola per chart. Use amber bottle.

Sig. Collyrium. Use gtt. i as needed or gtts x in 3ss of warm water, and use in an eye cup. H.

In Membranous Cataracts due to purely lenticular wounds fibrous tissue is not formed, because there are no fibroblasts in the lens; only when there is coincident injury to the iris, or adhesions to the corneal wound, is a fibrous cataract formed. Stevens's capsule punch promises well in such cases.

## SOCIETIES.

AMERICAN HOMŒOPATHIC OPHTHALMOLOGICAL, OTOLOGICAL AND LARYNGOLOGICAL SOCIETY.

The next meeting of this society will be held in Atlantic City, New Jersey, September 11th to 15th, inclusive.

The first session will be at 2 P. M., on Tuesday the 11th, and it has been agreed, on account of the International Homocopathic Congress, that no sessions will be held during the forenoons of Tuesday, Wednesday or Thursday, giving way to the general work of the Congress, which many of our members will be glad of an opportunity to attend.

Our headquarters will be at the Hotel Dennis, which has been greatly enlarged and improved since we last visited Atlantic City; it will be all the more pleasant if our members will secure accommodations there, so that we may be together and have an opportunity to become better acquainted with one another. A special rate will be given us, which will be made known in good time.

A good program is assured, and I would urge every one to plan to be present.

Fraternally.

JOHN B. GARRISON, M. D., President.

## "LEST WE FORGET."

AN ADDRESS, AUTHORIZED BY THE REGULAR HOMŒOPATHIC MEDICAL SOCIETY OF CHICAGO.

Truth is unchangeable and uncompromising. Wherever found it is in perfect harmony with all other truth. Whenever and wherever you find discord you may rest assured that something has been allowed to creep in that is false, and *that* something must be removed before harmony can be restored. To just the degree that truth is made to yield

to the demands of error will the results be unsatisfactory and real progress retarded.

Homoeopathy stands for a law of cure. It is founded upon a truth and has been demonstrated not only by means of its works, but by reason of its harmonious relation with all other established truths. To-day the homoeopathic profession is divided into two uncompromising factions; either one is right, or both are wrong. By their fruits shall ye know them.

It is a specious plea that homoeopathy is limited in its action, and that consequently our students must be taught everything in medicine; but alas and alack! the time has been too short for everything, so homoeopathy is being crowded out.

The public asks for homoeopathy and is given to understand that it is receiving the very best homoeopathy in the market.—a strictly, modern, up-to-date, twentieth century inspiration. The public knows no better, and ofttimes the physician shows equally limited knowledge of the real truth, for his practice is thoroughly consistent with much of the teaching received while attending a homoeopathic (?) college.

The old cry against the "narrow," "dogmatic," "sectarian" spirit of homoeopathy is heard no more. On the contrary, the old barriers are being removed and the door swings wide open to the "modern" homoeopath—and why not, when there has been such a complete surrender of everything that savors of homoeopathy? Mark this radical difference, however, between the recreant homoeopath and the convert from the empirical teachings of the "old school"—the first departed from the faith because he was not willing to make the close application required of a faithful follower of Hahnemann, and, for the same reason, usually is content with the discarded practice of a past decade, while the convert to homoeopathy invariably insists upon the strictest application of the teachings of Hahnemann.

Were it a matter of individual opinion our lips would be closed, because it is the inalienable right of every thoughtful man or woman to act as his or her best judgment may dictate (provided the common rights of humanity are not encroached upon by such acts); but when these would-be leaders, these self-constituted moulders of medical thought adopt the tactics of their erstwhile enemies by treating with ridicule the conscientious efforts of homeopathic practitioners, and, wherever possible, closing the door of opportunity in the face of those who would challenge their teaching, the time has come when the mass

of homœopathic practitioners should rise up in their might and repudiate the leadership of such false teachers.

If we read the signs correctly, the time is ripe and the profession ready to begin an aggressive campaign for the restoration of homoeopathy to its logical place in the domain of medicine. This is to be no ephemeral movement, but the beginning of a struggle that will be most vigorously pushed until the banner of homoeopathy shall have been rescued from the hands of its traducers and restored to its former proud position as the synonym of law and truth. It bases its expectations of success upon the convincing power of its "law of cure" successfully applied; the comprehensive scope of its organization and the earnestness of its adherents.

To-day Chicago is recognized as the "Homoeopathic Center of the World." It, therefore, seems natural that this new movement should find a focal center at this point; and the logical outgrowth of the protest which has been made for many years is found in the organization of

#### THE REGULAR HOMEOPATHIC MEDICAL SOCIETY.

It is actuated by the single purpose of preserving and promoting the principle of homœopathy, and will co-operate with any individual or organization having a similar purpose. Its declaration of principles is broad enough for any honest follower of Hahnemann, and at the same time simple enough to admit no misunderstanding. No attempt is made to dictate the practical application of those principles. That is left to the judgment of the individual; but every known means will be employed to make the application of those principles so simple that the temptation to resort to doubtful expedients will be continually lessened.

About seventy-five responded to the first general call February 6, 1906, when the following declaration of principles was adopted:

First. The law of similars is the law of nature.

Second. The single, similar remedy is the only scientific prescription. Third. The proper dose is the minimum amount sufficient to cure (the potency being left to the discretion of the physician).

Fourth. The indicated remedy is the remedy based upon the totality of the symptoms in each individual case (totality meaning the sum total of the deviation from the normal state).

Note.—This society recognizes that there may be times in the prac-

tice of individual members when, not knowing what else to do, they may think it necessary to resort to palliative measures. While such treatment may seem justifiable, and will be tolerated, it is nevertheless unhomxopathic, and is not endorsed by this society.

The officers elected were:

President, A. C. Cowperthwaite.

First Vice-President, H. C. Allen.

Second Vice-President, D. M. MacMullen.

Secretary, G. P. Waring.

Treasurer, H. H. Baker.

Executive Committee: President (ex-officio), E. A. Taylor, H. Farrington, J. B. S. King, J. W. Hingston, H. W. Pierson, G. P. Waring. Regular meetings of this society will be held on the first Tuesday night of each month at 8:00 o'clock. Stenographic reports of each meeting will be made, and a bound copy of the transactions for the year may become the property of each member. For the present the yearly dues have been placed at two dollars.

A cordial invitation to join is extended to all homoeopathic physicians who can attend. Other cities and localities are also urged to organize where the regular homoeopaths desire to co-operate in the above plan to preserve and promote homoeopathy.

Guernsey P. Waring, Secretary.

Chicago, February 15, 1906.

## CORRESPONDENCE.

## THE OSTEOPATHIC BILL.

HOMEOPATHIC MEDICAL SOCIETY OF THE STATE OF NEW YORK.

March 7, 1906.

Dear Doctor,—Your attention is called to a bill introduced in the Legislature by Senator Hinman, entitled "An Act Regulating the Practice of Osteopathy in the State of New York."

This bill is similar to those introduced in the Legislature in previous years, and is a continuation of the attempt by the osteopaths to create out of a system or method of manual. or hand therapeutics, which is nothing but a single agent used in the treatment of disease, a school of medicine with a special board of examiners.

The bill exempts "Any person who at the time of the passage of this act shall be actually engaged in the practice of osteopathy in this state, and who shall be a graduate in good standing of a regularly conducted school of osteopathy within the United States, requiring a course of two years or longer, with actual attendance of at least twenty months, and who shall be recommended to the Regents by the State Board of Osteopathy examiners, shall upon application and payment of \$25.00, without examination, be granted a license to practice osteopathy."

This provision, as will be clearly seen, practically nullifies the present excellent qualifications demanded by the existing medical law.

Again, this bill calls for but three years of attendance at one of the osteopathic colleges, a full year less than the time required by law of every student at medical colleges.

These two points plainly demonstrate again the determination of the osteopaths to obtain the privileges and powers of legal practitioners of

Note.—We publish this that the osteopathic endeavors for legal recognition in other states may be met more effectually. In New York each successive osteopathic bill has been less unsatisfactory, and indications point to the possibility that we can yet force them to pass the examination for medical license.—Editor.

medicine without being obliged to obtain the necessary education and training. The moment they are willing to make their bill conform to the present requirements of our excellent educational medical law they would remove much of the opposition to the measure

The further objections to this bill may be summarized as follows:

First. The bill permits certain practitioners, of a branch of medicine known as osteopathy, to receive a license to practice legally a branch of medicine without passing an examination, there being no evidence that they possess any knowledge of sanitation and the protection of the public from contagious and infectious diseases.

Second. Osteopathy is a single agent or method used in the treatment of disease, and is included in the general practice of medicine, and is now and has been used by the licensed physicians of this state, and it should not have a special examining board, which would lower the educational standing of the physicians in this state.

Third. Osteopathy should not be made a special branch of medicine by an act of the Legislature, but should come under the present state laws, which govern all the special branches as well as the general practice of medicine. Any of the 11,923 licensed physicians in this state have already the right to practice osteopathy as a specialty.

Fourth. The Legislature should protect the public by withholding the endorsement of the state from any person, as being capable of treating the diseases of the human body, unless such person can make a diagnosis of the condition of the human body, and can protect the individual and the public from contagious and infectious diseases, to do which requires a full knowledge of the science of medicine as taught in the medical colleges of this state, including the use of drugs, sera, and other valuable therapeutic agents. From an educational standpoint the enactment of the osteopathic bill would be a retrograde movement, there being no recognized osteopathic college in this state.

And, finally, it would be more reasonable for the Legislature to separate the special branches of criminal, corporation and real estate law from the general practice of law, and establish for each of them a special examining board, than it would be for the Legislature to select one special therapeutic agent used in the treatment of disease and separate it from the general practice of medicine at the request of those enthusiasts who are now asking for a special osteopathic examining board.

The bill is Senate No. 293, introduced by Senator Hinman.

The bill has been referred to the Committee on Judiciary, which is made up as follows:

Hon. Edgar T. Brackett, Ten Eyck, Albany.

Hon. Geoge A. Davis, Ten Eyck, Albany.

Hon. Nathaniel Elsberg. Ten Eyck, Albany.

Hon. William W. Armstrong, Albany Club. Albany.

Hon. Spencer K. Warwick, Ten Eyck. Albany.

Hon. Merton E. Lewis, Stanwix Hall, Albany.

Hon. George H. Cobb, New Kenmore. Albany.

Hon. Alfred R. Page. 101 Lancaster St., Albany.

Hon. John Raines, 109 Lancaster St., Albany. Hon. Patrick H. McCarren, Ten Eyck, Albany.

Hon. Jacob Marks. Ten Eyck, Albany.

Hon. Thos. F. Grady, 130 Lancaster St., Albany. .

Do not delay; write at once a strong letter to your representatives, and get your friends to write. Send a letter especially to members of the Judiciary Committee.

Do it now.

Very truly yours,

Eugene H. Porter, Chairman Legislative Committee.

## A NEW YORK STATE PROVING.

113 W. 71st St., New York.

## An Open Letter:

The homoeopathic physicians of Massachusetts\* have recently completed a valuable reproving of belladonna. It is proposed that New York state add its quota to materia medica by a drug proving for 1906. The drug chosen will be a plant of which some clinical account is

<sup>\*</sup>A very peculiar misapprehension. That proving under the auspices of the American Hom. O., O. and L. Society, covered the United States. The New York State and County Societies contributed toward its expenses. Dr. Shedd's committee will do well to familiarize themselves with that great work before beginning their proving.—Eptror.

given in homoeopathic literature, but of which no scientific proving has been made. The drug will be supplied in tincture, 3d, 12th, 30th, 200th, 1000th.

Homoeopathic physicians are requested to signify their willingness to prove the "unknown quantity" by sending a postal to the undersigned, when the drug will be forwarded. Any of the laity whom physicians may enlist in this work, and who will be under their observation during the use of the drug, will also be supplied (through the physician).

Before such proving, a careful anamnesis should be recorded (all records should be kept on, or transferred to, legal cap, one side of the sheet only); six ounces (including sediment) of a 24 hrs. urine (add gtt. x formalin) should be sent (with name, address, quantity in 24 hrs., reaction when passed) to the official pathologist, Dr. P. D. Saylor, 133-137 West 47th St., N. Y. City, for examination. The blood count (before and after the proving) will also be taken by the pathologist, Dr. Saylor, when it is possible (otherwise by the nearest physician with the apparatus), or disregarded if impossible to obtain.

Where it is possible, provers are requested to have examinations made by specialists in the various branches that the proving may be of greater value.

It is desired that every practitioner enter, to some extent, into the proving. For example, a few doses of the tincture or potency may be taken until some disturbance of cellular or functional equilibrium is noted:—constipation, headache, insomnia, drowsiness, thirst, increased or lessened appetite, etc., etc. When the direction of this disturbance is thus indicated the drug may be stopped if the individual does not care to continue its study, and in this way a mass of confirmatory and the latest provided the drug may sources will accumulate.

Furthermore, the preliminary knowledge thus gained by the physiwill lend additional interest in, and appreciation of the full proves of the drug.

these self-provings sections 120-141 of The Organon should be used.

Physicians in other states than New York who would like to take for in the proving will be most welcome, will be supplied with the drees, and full credit will be given.

The proving will begin with each individual whenever he or she is

ready, preferably before May 1st, that the results may be early tabulated for publication.

Fraternally,

P. W. SHEDD, M. D.,

Chairman of the Drug Proving Committee, N. Y. County Society, and of the Materia Medica Bureau, 1905-6, N. Y. State Society. Drug Proving Committee:

P. W. SHEDD, M. D., Chairman; L. M. STANTON, M. D., W. H. DIEFFENBACH, M. D., J. B. GARRISON, M. D., SPENCER CARLETON, M. D.

## BOOK REVIEWS.

THE WORLD'S ANATOMISTS. By G. W. H. KEMPER, M. D. Revised and enlarged from the original serial publication in *The Medical Book News*, with 11 illustrations, 9 of which are portraits. Pocket size; 79 pages. Price, 50 cents. P. Blakiston's Son & Co., Philadelphia. 1905.

These 229 concise biographies, alphabetically arranged, extend from Herophilus, 300 B. C., to Burt. G. Wilder, now living at Cornell University, and McBurney, of New York. The parts named after each anatomist are described, and we are told for what he is celebrated.





# Ege, Ear and Throat Journal.

Vol. XIL

Lancaster, Pa., and New York, May, 1906.

No. 5.

## EDITORIAL.

#### HOM COPATHY AND OSTEOPATHY.

ANY, if not all, allopaths and state education officials jump to the conclusion that homoeopathy and osteopathy are comparable systems, and that the claim of the latter, in this state, for a separate board because the homoeopaths are so recognized is a strong one with justice behind it. A proper understanding will show the fallacy of this.

Homoeopathy—the law of similia—extends wherever the physician, surgeon or specialist considers medicinal therapeutics applicable; it is not the only thing in medicine—Hahnemann taught that under some circumstances drugs should be administered allopathically. telligent practice of homoeopathy requires, and its colleges teach, a knowledge of medicine in general. "A homocopathic physician is one who adds to his knowledge of medicine a special knowledge of therapeutics and observes the law of similia." He is none the less a surgeon gynæcologist, obstetrician. alienist, oculist, microscopist, pathologist, diagnostician, or sanitarian because his armamentarium is enriched with the resources of the homoeopathic materia medica. "All that pertains to the great field of medical learning is his," because he holds his diploma from an old school college or from a homosopathic college which has covered the same subjects in the same length of time and which has been authorized by the state to confer the same rights, privileges and immunities.

Homosopathy is to-day a separate school of medicine solely because the bigotry, intolerance and persecution of the allopaths forced those desiring to study, practice and teach it to create separate colleges, institutions and journals. These are recognized and protected by the state (in this country); should this protection be withdrawn the same bigotry which even yet closes the doors to army and navy medical appointments against homœopaths (despite the crying need for more medical officers) would slowly but surely strangle homœopathy. The appropriations for Gowanda, Middletown, the Metropolitan Hospital etc., would be withdrawn until the distinctive character of their charters were abrogated; the homœopathic colleges would be starved out.

These are not exaggerated fears; the enemies of homoeopathy are not dead nor even sleeping, the lamb skin they have pretended to assume is not a sufficient disguise, their baa betrays the larynx of the wolf. Witness how the American Medical Association preserves practically the same old intolerance in its present code of ethics. despite sincere efforts on the part of its more liberal members for the adoption of the Buffalo liberality.

Witness also the treacherous, sneaking introduction of bill 1715 into the N. Y. Assembly the other day, endeavoring to recast the three medical examining boards into one without a single bit of fair play to homocopathy or to the eclectic school—a bill full of absurdities that would lower the medical standard of the state if adopted without amendment.

The claim that it is necessary to have a single board in order to refuse the osteopaths' request for their own board of examiners is a palpable blind to hoodwink us. At the hearing on this bill the lawyer who spoke in its favor—evidently the man who drew it up—boldly asserted that the schools never should have had such recognition; he ignored the rights of the minority and the fact that this is a matter of principle not to be decided by relative numbers.

Osteopathy does not have the same right as does homoeopathy to recognition by the state nor to a separate examining board; it is but a single agent for the treatment of disease. Every licensed physician has the right already to practice it as a specialty. One osteopath, who is a graduated physician now teaching in a medical college, states that osteopathy can do nothing that a skillful physician well up in technique can not accomplish with vibratory massage.

The official definition of osteopathy\* is: "That system of healing

<sup>\*</sup>As formulated in Assembly bill 627 (Albany, 1906).

which treats diseases of the human body by manual therapeutics for the stimulation of the remedial forces within the body itself, for the correction of misplaced tissue and the removal of obstructions or interferences with the fluids of the body, all without the internal administration of drugs or medicines."

Its teachers and most of its practitioners are enthusiasts who belittle other therapeutic measures and ignore medicine outside of their narrow purview; they are not educated physicians. Their anatomy, physiology and diagnosis are studied with a view to and in the light of their theory. Happily an increasing number of their most intelligent practitioners are taking the degree of M. D. at good medical colleges.

Each successive osteopathic bill has conceded higher and higher qualifications, thus admitting the justice of the State in requiring them to come up to its standard; but they are trying to get along with as little as possible, and to induce the State to lower for them as many bars as possible.

As said above, osteopathy is only a single agent—but one variety of physical therapeutics. Years ago some other enthusiastic extremists, most if not all of whom were not qualified physicians, attempted to established a "system" of hydrotherapy as a cure-all which they, like to day's osteopaths, called scientific. That had a vogue for awhile, but all that is good in it may be now learned in the medical schools and literature.

The N. Y. Homoeopathic Medical College has had for a number of years a chair of physical therapeutics (as well as one of physiological materia medica), and at present it has under consideration the teaching of osteopathy.

do this, especially in a number of medical colleges, will do more than any other one thing to prevent an osteopathic examining board; it afford strong ground with the legislature against recognizing pathy as a distinct school, and the latter will thus be placed upon of a plane with massage, electricity and surgery—where it belongs.

the osteopaths are in deadly earnest, this means much more to them it does to us; it can not be defeated by half-hearted measures.

is the duty of every physician to convince such legislators as he reach directly and indirectly of the inadvisability of granting an opathic examining board. Pledges to this end should be secure in

promptly. The Hinman osteopathic bill has unexpectedly been passed by the senate; last year its majority there was larger, but it then got no further—however, it will not be safe to leave undone any effort to defeat it.

As shown above, the homoeopathic board is no argument in favor of an osteopathic one; but the latter would afford a precedent for similar recognition of vibratory massage or of any other single therapeutic procedure dignifying itself as a specialty.

## DILATION OR DILATATION.

The words dilatio and dilatatio express two entirely distinct conceptions, and they ought not to be confounded.

Dilatio, onis, f. is a classical word and means retardation, delay, protraction, postponement, putting off; it is much in use among the jurists; dilatio citatoria, time given to appear (in court); dilatio definitioria, extension of time for decision; dilatio judicialis, postponement pronounced by the judge.

Dilatio is an abstraction of the perfect participle of a compound verb consisting of dis or di (originally Greek), meaning asunder, and fero, ferre, tuli, latum, to carry, to fetch, to bring, etc. Thus the verb fero, ferre, tuli, latum, modified by the particle dis, received the form of difero, diferre, distuli, dilatum, to put off, to postpone, to bear over to another time; whence dilatio (as remarked already a classical word), the postponement, the putting off, the leaving for a later time

Dilatatio is an abstract noun from dilato, dilatare, dilatavi, dilatatum, to widen out, to make wide, to stretch. The Romans never formed an abstraction (an -io, -ionis, noun, as "dilatatio") from dilato until the time of Q. Septimius Florens Tertullianus (about 420 A. D.). The translator of the Vulgate introduced this word into the Bible, and thence it came into science in the sense of stretching, widening.

## A PERITHELIOMA OF THE ORBIT.\*

CHARLES C. BOYLE, M. D.,

### New York.

HE patient, a man of 45 years, had been complaining for two or three months of stoppage of the left nostril accompanied by severe frontal headache and pain in the back of the head. Dr. Teets first saw the case in his nose and throat clinic at the New York Ophthalmic Hospital. On examination the left nostril was found occluded by a large grayish mass. This was removed, with profuse bleeding; at the same time he entered the frontal sinus from within the nostril and allowed a large quantity of pus to escape. The patient was comfortable for a time, but the growth reappeared in a couple of weeks, with some swelling of the left eyelids, especially the upper at the inner canthus, accompanied by protrusion, straight ahead, and perlect immobility of the eyeball. He was sent to the Metropolitan Hospital. where I took charge of him on account of his eye symptoms. The immobility of the eye, I concluded, was due to the growth surrounding the cone of muscles at the back of the orbit; this was found to be the case on removal of the eyeball.

Examination of the fundus revealed nothing abnormal, except an extremely anæmic and pale condition of the optic nerve, due to pressure by the tumor shutting off the blood from the arteria centralis retinæ; entire loss of sight was the result. The fundus of the unaffected eye

was normal, and its vision was apparently normal.

After the patient was put under ether, I cut down in the neck in front of the sterno-cleido-mastoid muscle, and put a ligature around the comon carotid, anticipating profuse hæmorrhage; did not tie it, but was ready to do so. Although hæmorrhage was profuse during the operation, it was not severe enough to necessitate ligation, as I had expected it would be. I then proceeded to make an exenteration of the orbit: First, enlarging the outer canthus by a deep horizontal in-

<sup>\*</sup>Written expressly for this JOURNAL.

cision about an inch long, and then cut with my scalpel around the entire border of the orbit down through the periosteum; this incision was made inside of the lids. When this was done, with a periosteotome I separated the periosteum from the entire orbital cavity, and after cutting the optic nerve with scissors, was able to remove the entire mass, consisting of eyeball, appendages, periosteum and tumor; the latter was closely connected with the periosteum back of the eyeball, and extending down from the orbit into the antrum. On inspection of the orbit we found an opening in its floor leading into the antrum of Highmore. The probabilities are that the growth started from the orbit, or, possibly, from the cranial cavity, and extended downward, especially as the history shows that the patient had complained of headaches for some time.

Through the opening in the floor of the orbit, which I enlarged, I removed the mass which formed this growth. It was a friable, non-resistant substance, and was more like removing clots of blood than anything else you could compare it to. There was no consistency to it, it simply had to be taken out with gauze and curette. I then made an incision up from the inner canthus over the frontal sinus, and after dissecting this flap back opened the frontal sinus with a chisel and mallet, finding it filled with pus. There were no signs of any of the substance that formed this tumor, and no apparent connection with it. After stitching up the wounds in the canthi and forehead the frontal sinus, orbit and antrum were packed with iodoform gauze, an external pad of sterilized gauze was placed outside and then bandaged.

The condition of the patient was not the best after the operation, but he rallied under stimulants, and for the next twenty-four hours was doing nicely, when his temperature and pulse started upward, the former going to  $104^{\circ}$ , and latter to 130; this was accompanied by delirium and unconsciousness. Under veratrum viride  $\theta$  gtt. v. every hour, the temperature and pulse fell, but the patient relapsed into coma, which continued four days until he died. Death was evidently due to meningitis set up by a post-operative inflammation in that part of the growth that extended into the brain. There does not seem to be any other way to explain it, unless by metastasis; the optic nerve was not involved. Unfortunately we were unable to obtain a post-mortem.

I am indebted to Dr. Bond for a microscopical examination of the tumor; he pronounced it a perithelioma, formerly called angiosarcoma.

The following is a description of a perithelioma given me by Dr. Slow:

A perithelioma is a tumor composed of many blood vessels arising from whose adventitia are epithelial cells standing one upon the other and radiating from the vessel wall, their long axis being perpendicular to the outer wall of the blood vessels.

Not of very frequent occurrence, they are malignant and often branch into the surrounding blood vessels, forming emboli and (in distant parts of the body) secondary tumors exactly identical with the original growth. They can only originate in organs whose blood vessels are possessed of a perithelium. A perithelium is an epithelial cellular coat surrounding the adventitia of certain arteries; by some it is considered the outer epithelial layer of the adventitia. Peritheliomas are chiefly formed in the adrenal, coccygeal, carotid, ovariam, testicular, mammary and salivary glands; also in the brain and somteimes in the kidnevs.

Four or five years ago I had a similar case—a woman—in the Metropolitan Hospital; operated her in the same way. recovered from the operation, remained in the hospital for four or five weeks, and left of her own free will; what became of her after that I do not know, although the supposition is that the growth returned and eventually killed her.

49 W. 37th Street.

Treatment of Trachoma. Dr. J. M. Hinson massages the cocainized palpebral mucous membrane with powdered boric acid, to which he has of late added alphozone powder in various proportions, by means of a cotton wound probe. The partially dissolved powder is allowed to remain under the lids, the eye bandaged and cold applications applied. Repeat every three days for a while, then once a week. There are practically no scars left in the lid. The massage must be thorough, even to bleeding.

We would be glad to have the experience of our readers in this. especially as to whether the addition of alphozone is any improvement; if so, what? over the simple boric acid.

Mosquito Stings, as well as those of guats, are prevented by applying freely to the skin a little oil of lavender, one part each of kerosene oil and soft soap, six parts of water. This does not injure the skin, even when frequently used.

## THE PATHOLOGY OF PROGRESSIVE MYOPIA.\*

F. PARK LEWIS, M. D.,

## Buffalo, N. Y.

PROGRESSIVE increase in myopia, whether functional or axial, is primarily dependent upon disturbed relationship between the intrinsic and extrinsic ocular muscles. Convergence and accommodation are coincident, and in normal conditions the ciliary and the branch of the third nerve supplying the interni are energized by the same nervous impulse.

As convergence at some angle, however long it may be, even at infinity, is essential to binocular vision, the interni normally are much stronger than the externi. The proportion should be as six or eight to one.

When, as happens in almost all cases of progressive myopia, this relationship is altered or reversed, and the externi are as strong or stronger than the interni, the energy necessary to actuate the latter to produce a given effect must be proportionately increased. If instead of being eight times as strong as the externi the lateral muscles are evenly balanced, the effort of convergence must be eight times as great as it would normally be.

This effort is ineffective because it is opposed by the greater abduction. As both centers, the ciliary and the third, are coincidentally energized, the same attempt at over-accommodation, which is eight times greater than it should be, is made. The effort at convergence, owing to the opposing resistance, is abortive: so, too, as the muscles work together is that of accommodation.

The weakened interni cannot successfully combat the strong externi. The attempt, however, is constantly made and a spasm results. Accommodation cannot be dissociated in degree from convergence. The ciliary is, therefore, weakened and the pupil dilated. The attempt at ciliary contraction, however, as with the interni in convergence, is con-

<sup>\*</sup>Written expressly for this JOURNAL.

stantly made, as the same energy supplies both, with the same result—a weak muscle in a condition of spasm. We, therefore, meet the anomalous but perfectly explainable condition of a ciliary spasm with a dilated ous but perfectly explainable condition of a ciliary spasm with a dilated pupil. Occasionally when the interni are not too weak it is still possible to have a contracted pupil with the same condition.

As I have attempted to show elsewhere,\* the act of accommodation is associated and dependent upon a congestion of the ciliary processes.

When this overfilling of the large ciliary capillaries is not of temporary duration (as in the act of near vision), but is persistent, the large amount of blood normally found in this vascular region or physiologic center is increased, making it a pathologic center. It is dammed back, the venæ vorticosæ become turgid, and the fundus becomes the seat of a passive inflammation. What was functional becomes organic. The sclera stretches at the point of least resistance, and we have the pathology of progressive myopia. The degree and rapidity of the changes depend upon the amount of muscular disparity.

The muscular imbalance may be functional, when general and local hygienic measures must be instituted looking to a restoration of the normal dynamic relationships. It is often organic; then a tenotomy is the only remedy.

In any event the usual measures employed, rest and abstinence from close work, are merely palliative, frequently not even halting the progress of the disease.

Conflect a cure the muscular conditions must be carefully studied

Franklin Street.

"It's easy enough to be pleasant
When life goes by like a song;
But the man worth while,
Is the man with a smile
When everything goes dead wrong."

<sup>\*</sup>The Ciliary Process in Accommodation, Am. Jour. of Ophth., November, 1905.

## ADENOIDS.\*

CHARLES C. STRAUGHN, M. D.,

Matawan, N. Y.

YPERTROPHY of the pharyngeal tonsil, or, as it is commonly called, adenoid vegetations, is one of the common diseases of childhood. It is seldom seen before the second year, but it has been seen as early as the first month. It may persist in adult life, but does not originate after puberty. It usually co-exists with hypertrophied tonsils, but is frequently found existing as a separate condition.

Two varieties are usually met with. The soft is the more common, and is formed chiefly of the hypertrophied symphoid tissue, while the hard has a considerable addition of connective tissue.

I will not enter into its etiology, except to state that it is frequently inherited, and that its most common exciting cause is the climatic changes of which we are especially subject, nor into its pathology, except to state that it is an hypertrophy of the normal glandular tissue in the vault of the pharynx, my object being merely to suggest treatment of a condition that is neglected by a great many physicians, who either fail to make an early diagnosis, or, believing that only surgical means are efficacious, neglect to give it the early attention it needs. In the early stage it is amenable to intelligent local and internal treatment, and surgical measures become necessary only from its neglect.

The early symptoms are not characteristic. The history of frequent recurring colds, aggravated in character, difficult to relieve, and with temporary mouth breathing, especially at night, should always arouse a suspicion of adenoids. Ocular inspection of the pharynx at this time may reveal isolated, pinkish spots of hypertrophy on the pharyngeal wall. There may also be a tenacious, grayish or pinkish mucus discharge dropping from the posterior nares. An alteration of the voice may be noticeable, it having a nasal twang.

<sup>\*</sup>Read before the New Jersey State Homœopathic Medical Society.

The diagnosis of these cases is readily made if one will only take the trouble to learn the normal pharynx. Digital examination is the easiest and most positive method of examination. Stand behind the patient, who is sitting on a low chair with head thrown back, and have them open the mouth wide, then with the thumb or index finger of left hand press firmly on the cheek, forcing it between the jaws. This makes a very effective mouth gag. Pass the index finger of right hand into the mouth along the hard palate to one side of the uvula and into the pharynx, passing over the soft palate and into the vault. In the normal pharynx the membrane has a smooth feel, with adenoids there is a feel expressed as a bag of angle worms. To me it is more the feel of a piece of raw beefsteak. Usually it is soft and vielding. If adenoids are present, on withdrawing the finger, you will find some blood upon it.

The early treatment of these cases is simple. In addition to the indicated remedy I use a bland oil dropped into the nostrils each night. Benzoinol is a good oil for this purpose. I have the patient reclining with a pillow under the shoulders and the head thrown well back, then put about ten drops of the oil into each nostril from a benzoinol dropper, and have the patient lie quiet for ten minutes that the oil may run through into the pharynx. I like this better than sprays, as it reaches the hypertrophied area better and can be carried out thoroughly at home. This, of course, is merely palliative, but it is of considerable value in relieving the inflammtaion.

The indicated remedy is of most importance, but it must be indicated. Haphazard prescribing is not going to cure your patients. Of course, there are some remedies more often indicated than others, but any constitutional remedy may be indicated; those affecting glandular tissue generally, are especially useful.

I will not attempt to give all the remedies that may be useful, ror the symptoms upon which they should be prescribed, only mentioning a few of those most useful to me and their general indications. The most useful remedies in my experience have been those that correct any underlying constitutional fault.

Silica, while a remedy not usually mentioned for this condition, is a most useful one. The typical silica patient is emaciated, not from lack of food, but from imperfect assimilation of what is eaten. They are scrofulous with protruding abdomen and weak joints. The cervical and parotid glands are enlarged. The child is irritable, peevish and low-spirited, restless, fidgety, sensitive to noise and unable to fix the

attention on anything. There is profuse, sour, offensive sweating of feet during the day. The mucous membrane may be congested, with secretion of thick, offensive, yellow or yellowish green, tenacious mucus, or dry and hyperæmic with crusts of altered mucus from posterior nares adhering to it. Throat is sore as if swallowing over a lump or excoriated surface.

The calc. phos. patient is also thin and emaciated, but here the patient does not care to eat. In this instance the abdomen is caved in and flabby. The skin is brownish or yellow. The patient is peevish and fretful, grows slowly and learns slowly. There is dryness of mucous membrane or increased mucous discharge mixed with crusts or blood. Membrane is pale and flabby. Roughness of throat. Pain on swallowing extending into Eustachian tube.

The calc carb. patient, on the other hand, has a tendency to grow fat They are fair and plump. They have large heads and protruding abdomens. There is a painful swelling of submaxillary glands. There is also profuse sweating during sleep, but it is not offensive. The nucous membrane is congested and relaxed. There is secretion of yellowish or dirty white mucus. Burning in throat and feeling of constriction, swallowing painful, shoofing into ears.

Baryta carb. is with me of equal value with silica. The two remedies, in fact, have met most cases. We have again a child improperly nourished. They are hungry, but food distresses and they refuse it. The cervical and submaxillary glands are painfully indurated. There is a mental and bodily weakness, memory is deficient, and they are hard to teach. Child dreads strangers. Does not want to play. Think they are being criticised. There is also offensive sweat, but it is principally left-sided. Dryness of mucous membrane or increased secretion of thick, yellow mucus. Frequent bleeding from mucous membrane. Smarting in throat, especially from empty swallowing. Tendency to suppuration of tonsils after every cold. Takes cold easily.

Burnett lauds thuja 30, bacillinum 30, and phytolacca in this condition associated with hypertrophy of tonsils, believing it a manifestation of vaccinosis, tuberculosis or rheumatism. He thinks it well to begin the treatment with sulphur 30.

In closing, I wish to emphasize the fact that, in my opinion, it is only in the early stage that adenoids are amenable to local and internal treatment. After obstructive symptoms have developed, nothing but complete removal by surgical means will relieve the condition and check the tendency to severe complications.



### SARCOMA OF THE CHOROID.\*

WILLIAM F. BEGGS, M. D.,

Newark, N. J.

malignancy, followed in sufficient time by an accurate diagnosis, and radical treatment, has led me to write an essay on case, giving in detail the symptoms which were collectively taken elaborated till a successful termination of the case was established. The subject was a male, æt. 43 years, presenting himself to me in April, 1903, for an examination of his eyes. Other than an occasional attack of nephritic coloc (due to gravel) he has previously to this a dean bill of health. There was no history of cancer in his family. At no previous time had our subject consulted an oculist. His occupation being that of bookkeeping, he early consulted me at the date previously given.

At this time the vision of right eye was  $^{20}/_{15}$ ; no correction necessary; the left eye saw  $^{20}/_{30}$  with difficulty; the complaint being "a slight blur." Examining his field of vision I found a deficiency in the field near the normal blind spot amounting to about '(10°) ten degrees; this was an absolute scotoma for all colors. The macular region was unaffected as yet. Direct examination revealed detachment of a small segment of the retina located below the optic nerve. The patient was then referred to Dr. Edward J. Kipp, of Newark, N. J., for a confirmation in the diagnosis. This diagnosis was agreed upon but no suggestions as to cause. The rest upon the back for a month or more being quite out of the question, when statistics have shown such a low percentage of cures; the patient resumed his occupation, i. c. (bookkeeping), being told to report monthly for examination.

my records show the following progressive symptoms and visual

changes:

No Pain or any adventitious symptom.

Read before the New Jersey State Homocopathic Medical Society.

July 30, '03, O. D., same; O. S.,  $^{20}/_{200}$ . Same complaint. September 20, '03, O. D., same; O. S.,  $^{20}/_{200}$  with difficulty.

Some turbidity of aqueous humor, ophthalmoscopic examination difficult. Vision remaining being central and above disc. Pupil slightly larger than right eye, but fixed.

December, '03, O. D., same <sup>20</sup>/<sub>20</sub>; O. S., complete blindness.

No new symptoms or outward ocular change.

Presuming that this was the final unfortunate change, the subject was told to report again only in case the right eye gave trouble. Several months now elapsed until I saw the case again, which was in April, 1904. The patient came to see me about an irritation (slight hyperæmia) in both eyes, but most noticeable in the blind eye. I

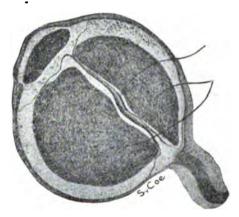


Fig. 1.—The tumor does not show in this section.

prescribed a mild astringent wash, which temporarily gave relief Up to this time there had been no pain.

Again my case came to hand, in June, early part. The same irritation was increasing, a noticeable puffiness being present under the left eye; the conjunctival vessels were dilated, and altogether the eye gave me a new picture. Pain had set in of a mild character a few weeks before. The symptoms being accounted for by a slight increase in tension. As all eyes affected with detached retina, uncomplicated, manifest a minus (—) tension, if any, and give no progressive appearance of irritation. I immediately concluded that our subject had an intraocular growth behind the retina, and, considering the age of the case and progressiveness of the disease, it in all likelihood was cancerous.

At no time was there limitation in incursions of the eyeball or any pain on movement.

Metastasis to the brain and liver being the thing now most feared an early enucleation was advised. The case was now referred to Dr. Frank M. Boynton, of New York City, for a confirmation in diagnosis and treatment. Dr. Boynton concurred in both propositions.

A few days following this the eye was removed (simple enucleation). Instilling a few drops of adrenalin, 1-1000, probably induced angioneurotic ædema, which, affecting the orbital cellular tissue, made what would ordinarily be an easily executed operation a complicated one. In fact, after removing the organ, there seemed to be about twice as much tissue left, and only under a firm pressure bandage could it be partially replaced and retained. Healing was necessarily retarded, so

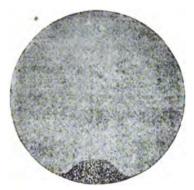


Fig. 2.—Microscopical appearance of the tumor; its relative size.

that it was about four weeks before we could begin with the artificial eye for permanent use. Considerable portion of the optic nerve was included in the dissection.

Up to this writing our patient retains perfect health, a period now of sixteen months.

To satisfy my mind as to the diagnosis I had a section made of the eye, longitudinal, for further examination. This was made at the N. Y. Post-Graduate Hospital. The drawing, No. I, which I show herewith, shows no trace of a growth. The retina is completely detached and pushed forward by blood clots, which entirely occupy the cavity of the eye. The diagnosis made by the pathologist was hæmorrhagic glaucoma. This accounting, seemingly, for the later recurring attacks of pain and congestion.

About six months following the making of this longitudinal section, the specimen was made use of by the post-graduate instructor. In making a transverse section through the post pole of the eye, there was discovered a growth which was sarcomatous, and involved the choroid. It was in measurement 2 mm. by 3 mm. The satisfaction in having

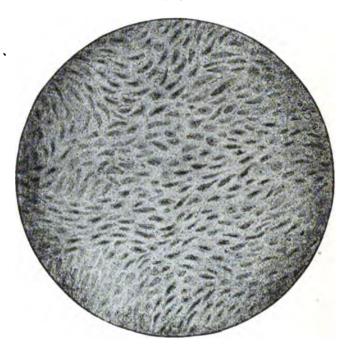


Fig. 3.—True sarcoma. A section of the growth.

the right diagnosis confirmed in such a unique way largely contributed to impress the case more strongly upon my mind, and to further classify facts and data in the form of a medical brief.

In my reading and research I find no case recorded where a similar growth was removed while covering such a limited area.

17 Fulton Street.

In the performance of high tracheotomy a great deal of room can be gained by dividing transversely the fascia that extends upward from the thyroid.—Am. Jour, of Surg.

### THE PUPIL.\*

### DAVID A. STRICKLER, M. D.,

### Denver. Colo.

HE pupil may be studied from the standpoint of the oculist bearing on the condition of the eye itself, from that of the neurologist, bearing upon conditions of the nervous system, or from that of the general physician bearing upon systemic conditions.

We will first consider a few general facts that are of interest to all. The normal pupil is circular and regular in outline. It is larger in early than in later life. Its size equals that of its fellow. Both respond alike when one is subjected to a change in the amount of light.

The pupils dilate under nervous excitement, from fear, surprise, under certain psychical influences (attention), during hunger, in anæmia and from nervous instability. They contract from light, accommodation, convergence, or, perhaps more correctly, from turning the eye toward the nose and during sleep.

Departures from the foregoing indicate some change in function, some lesion in the eye or in the nerve tracts upon which the reflexes depend. The seat and nature of the lesion it becomes the duty of the physician to ascertain.

The changes in the pupil in health are konwn as contraction and distation. Contraction is due to action of the sphincter pupillæ, supplied by the third nerve. Distation to action of the radiating muscular fibres situated in the posterior limiting membrane and by contraction of the blood vessels of the iris, both the radiating muscular fibres and the blood vessels being supplied by the sympathetic.

It follows that contraction results from stimulation of the third or oculo-motor nerve, or by paralysis of the sympathetic; dilatation from stimulation of sympathetic or paralysis of the third nerve.

The literature of the pupil tracts and pupillary phenomena is very, extensive, and by no means has the last word been uttered. The

<sup>\*</sup>Read before the Colorado Homeopathic Medical Society.

various theories would not interest you, and it is not our purpose to deal exhaustively with this feature of the subject. In a general way it may be accepted that the oculo-motor nerve fibres are conveyed through the ciliary ganglia and short ciliary nerves to the nucleus in the floor of aqueduct of sylvius where the three nuclei, 1st, that giving rise to the fibres sent to the sphincter pupillæ; 2d, to the ciliary muscle (accommodation), and 3d, to the internal rectus (convergence), are closely associated in position and action. The two sides communicate. The sympathetic or dilating fibres are given off from the cilio-spinal center of the lower cervical spinal cord.

The pupil is examined with relation to its size, shape, equality and its reflexes. As stated before, the normal is circular and regular in outline, larger in early than later life; its size equals that of its fellow; both react equally to change in illumination. Slight departure from the perfect circular and slight inequality in size of the two pupils are not infrequent and need excite no comment. Decided irregularity in shape is abnormal, and should suggest synechiæ (adhesion of iris to cornea or posterior by adhesions of iris to capsule of lens). The extent of posterior synechiæ is best ascertained by use of mydriatic and ophthalmoscopic examination.

The size of pupil is of less import than its reactions, but its relative size in youth and age should be constantly borne in mind. Small pupils in youth and large pupils in the aged will bear investigation. Persistent contraction of the pupil, if not due to posterior synechiæ, which is by far the most frequent single cause, may be due to narcotic poisoning, cerebral irritation, as in cerebritis or meningitis, to cerebral apoplexy, or to the early stages of fevers with cerebral congestion. It may result from any lesion involving the inhibitory fibres of cervical spinal cord. Persistent dilatation of the pupil should suggest: Ist, mydriatics; 2d, if past middle life, glaucoma; 3d, injury, usually the result of a blow; 4th, blindness; 5th, paralysis of the third nerve, or of some of its filaments, and 6th, irritation of the upper portion of the spinal cord, in the early stages of organic disease.

In its reactions the pupil is studied with reference to the effect of light, accommodation and convergence. It contracts with increased illumination, with accommodation and with convergence.

The light reflex may be direct or consensual. Direct, when the pupil contracts in the eye exposed to light; consensual or indirect, when the reflex occurs in its fellow eye, not exposed to the light. Normally

the two reflexes are equal, the pupils remaining of equal size. Blindness of an eye abolishes the direct reflex but does not alter its consensual reflex. Hence of diagnostic value in feigned blindness.

The reflex of accommodation and of convergence is obtained by directing the patient to first look in the distance and then at an object held several inches from the eyes, being careful that the illumination shall remain the same at both distances.

The three reflexes are closely associated. It is by virtue of this close association that they become of diagnostic value. Failure of the pupil to contract from light may be due to the use of a mydriatic, synechiæ, or rigid iris, loss of function of the retina or optic nerve, or to interference (paralysis) in the motor tract from the pupillary centers to the iris. If in the sensory tract (the retina or optic nerve), vision will be impaired to a greater extent than the pupillary reaction. If the vision be good and the pupil fail to react to light only, the fault lies in the fibres connecting the optic tract with the centers for pupillary contrac-This is the Argyll-Robertson pupil, a pupil showing the absence of reaction to light but retaining the reactions of convergence It is an important early symptom of locoand accommodation. motor ataxia or multiple sclerosis. It is usually, though not always, associated with a small pupil. This small pupil does not dilate in a darkened room. Loss of light reaction is important corroborative evidence of a patient's statement that the eve is blind. The loss of light reflex is present only when the interruption in the sensory tract lies anterior to the corpora quadrigemina, where the fibres which connect it with the motor tract are given off.

Blindness due to lesion back of this point may be absolute without interference with the pupillary reaction. This fact has an important pearing in localizing the lesion in hemianopsia. If the lesion be between the chiasm and the corpora quadrigemina, it destroys the pupillary reflex when the light is thrown upon the blind half of the retina, the so-called Wernicke's reaction of the pupil or hemiopic pupillary inaction. If the lesion lie back of the corpora quadrigemina the light reflex remains intact throughout the retina.

Slowness of reaction to light, inequality of the two pupils, or of the same pupil at different times, is indicative of chronic degenerative changes in the central nervous system.

705 Fourteenth Street.

## FUNCTIONAL, HYSTERIC, PSYCHIC OR URÆMIC AMAUROSIS.\*

FRANK B. SEITZ, M. D.,

Buffalo, N. Y.

ISS LAURA R., at. 20. of Derby. N. Y.. was led into my office. Wednesday, November 29, 1905, and gave the following history: Monday evening while crocheting and in possession of normal vision in both eyes, she became aware that everything appeared dull grey, then that that she could discern no objects, and in a few moments realized that she could not see with either eye, that she had become totally and helplessly blind with both eyes. The rapidity of the onset and the totality of the affliction to a patient who had not a single physical complaint came to her and the family as an overwhelming shock.

Further questioning revealed that a few days before, while on her way to some public function where she was to take part, and which usually taxed her ability to retain her confidence in addressing the public, she had an attack of vertigo with vomiting, but it was so slight as to soon disappear and not interfere with her participation in the meeting.

It was also stated that the last menstrual period was delayed, without, however, producing any immediate untoward symptoms. During the summer she had an attack of pneumonia. She recovered, but was in such a weakened condition at the time of college opening that her parents decided to keep her home during the term. The postponement was a severe disappointment to a bright, ambitious girl, and, perhaps, the somewhat weakened physical condition, added to the worry, helped to bring on the present attack. There is no history of an ocular or physical defect in the family.

Examination failed to reveal a single visible or demonstrable pa-

Written expressly for the Homogopathic Eye, Ear, Nose and Throat Iournal.

thological change in either eye. While the symptoms pointed to embolism of the central artery, the retina was of a uniform and normal color. The disc was clearly outlined and the vessels had the easy wavy contour and light streak of a healthy fundus. The pupil responded faintly to light, and the patient had full control of all extrinsic ocular muscles.

Dr. F. Park Lewis was consulted, and he failed to find any change to account for the trouble. He expressed the opinion that the cause was psychic, and would soon disappear. Dr. Lucien Howe was next consulted, and he found both eyes apparently healthy. His effort to detect malingering was in keeping with the course of a conservative practitioner. He suggested a blood test and urinalysis, the administration of strychnia, and gave a hopeful prognosis.

Blood and urine test by Dr. Jewett follows: Quantity of urine voided in 24 hours, 720 c. c. Amber acid, aromatic, specific gravity, 1025; solids, 41.94 grams = 5.8 per cent. Alkaline phosphates slight increase. Earthy phosphates, sulphates, chlorides and uric acid normal. Urea, 016, or 11.5 grams in 24 hours. No leucocytes, blood, epithelium or casts. Blood test: Hæmoglobin, 90 per cent.; red corpuscles, 4,000.000; white, 6,200. These examinations proved that there was nothing abnormal in either blood or urine.

Pathology. Was this functional, hysteric, psychic or uræmic amaurosis? It is true the function of sight was abrogated, also true that the brain, the seat of psychic force, refused to perform its part. Hysteria usually has previous or accompanying symptoms, which here were absent. It is an unalterable rule that there is a cause for an effect. Some material substance somewhere along the tract interfered with vision. There must have been some excretory matter in the blood that had the power to poison, to becloud, to suspend the activity of the optic areas. We have such a condition in scintillating scotoma.

Under ptomaine poisoning and botulismus we find amaurosis with paralysis of the external ocular muscles, but the digestive disturbance is the most prominent. Here it was very slight, and the muscles were under control. Toxic amblyopia from drugs was suggested by the former illness, but they must have been eliminated before the present attack. Cinchonism has a pale fundus, but its symptoms and history were absent. The Priestly Smith prism and candle malingering test were impossible, for she could not tell if an electric light was on or off. Anæsthesia retinæ is rather a symptom of a complicated neurosis

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than a special disorder of the retina, and is associated with other asthenopic disturbances and bodily ailments.

Fuchs says: "In nephritis disturbance of vision may occur under the form of transitory blindness without any retinitis being present. The patient declares that everything suddenly becomes dark before the eyes. After one or more days, the sight is gradually restored. With the attack there are other symptoms, such as vertigo, vomiting, dyspnæa, loss of consciousness, even convulsions—in short, the symptoms of uræmia.

The fact that the reaction of the pupil to light is in most cases preserved in spite of complete blindness proves that the affection cannot be in the eyeball nor in the optic nerve, but higher up; that is, in the brain which is poisoned by excretory matters in the blood. The blindness is, therefore, known as uræmic amaurosis." The condition described by Fuchs covers most exactly every point in the case. We know attacks of nephritis may be transitory and mild. The patient evidently had a mild uræmic attack the evening before the onset of blindness.

Diagnosis. Functional, hysteric, psychic or uræmic amaurosis?

Treatment. A hypodermic of 1-60 strychnia was given, and an emmenagogue and tonic were prescribed.

Course. Saturday. December 2d, five days after the onset, the patient could distinguish objects, and on Monday she walked in unassisted, and proved a vision of  $^{20}/_{20}$  in both eyes, a very happy termination of what promised to be a terrible affliction.

21 North Street.

When a patient complains of dysphagia, do not neglect to examine the pericardium for effusion.—Am. Jour. of Surg.

The best site for an urgent tracheotomy is through the crico-thyroid membrane. To hold the opening apart a couple of hair pins bent at the end may be used as retractors.—Am. Jour. of Surg.

A profuse, persistent, chronic discharge from the nose should lead one to suspect chronic disease of the frontal or other accessory sinus.—Am. Jour. of Surg.

The greatest immediate danger after a tracheotomy is the possibility of a subsequent pneumonia. This can, in a large measure, be obviated by filtering the inspired air through a soft sponge saturated with warm one per cent. phenol solution.—Am. Jour. of Surg.

### SYMPOSIUM.

EMMA L. Boice Hayes, Toledo: In reply to your question, "Should we discriminate between 'progressive,' 'malignant' and 'fulminating' myopia, and how?" I would say that in my estimation it is a question of degree.

"Progressive" means advancing or increasing. "Malignant" means unfavorable, unpropitious. While "fulminating" means the explosion. In other words, it is a case of "bad," "worse," "dead."

In my two cases reported, would class No. 1 as "progressive," but the boy is young yet, and may run the next steps if he lives long enough. No. 2 is "malignant."

F. PARK LEWIS, Buffalo: I think that malignant and fulminating myopia are merely matters of degree. I have intended some time to elaborate this idea in a paper, and I may do so later.

### Nasal Spray for Hay Fever.

B. Adrenalin chlor., gr. ss.
Normal saline sol., 3j.
Acid carbol., mj.
Glycerinum, 3ij.
Aq. ros., q. s. ad. 3ij.

M. Spray the nose every two or three hours; follow each time by spraying with:

B. Menthol,
Cocain mur., of each, gr. x.
Thymol, gr. ij.
Vaseline liq., q. s. ad. 3ij.

M. Sig. Use in an oil atomizer.

A swelling in the parotid region is not necessarily a part of the parotid gland. It may be an infection of the pre-auricular lymphatic gland. Such an enlargement may be associated with herpes of the forehead. or, sometimes, it may be part of a chain tuberculous lymph glands.

Amer. Jour. of Surg.

In determining the cause of a post-operative fever never fail to look at the throat.—Am. Jour. of Surg.

### PRACTICAL HINTS.

Conducted by G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

Glaucoma. Atropine is contra-indicated in an adult when the corneal diameter is below normal. Although the ciliary ring is below normal diameter the lens is usually of normal size and is apt to press on the iritic angle, thus predisposing to glaucoma.

The Removal of Deposits of Chalk and of Lead From the Cornea. Zur Hedden says chalky deposits in the cornea contain no albuminate of calcium, because calcium and albumin have very slight chemical affinity for each other, but contain calcium carbonate, while, on the contrary, the deposits of lead contain at first not the carbonate but the albuminate. Still the albuminate of lead becomes gradually transformed through the action of CO into the carbonate. He reports seven cases of incrustation of chalk on the human eye in which a noticeable improvement was twice obtained by the application of ammonium chloride as recommended by Guillery. In a case of lead incrustation, treated three times a day for three-quarters of an hour, each time with ammonium tartrate, the very thick opacity of the cornea passed nearly away in the course of seven weeks, and the vision became greatly improved.

Full Correction of High Degrees of Myopia. It is necessary to sound a note of warning in these days when so much is said about the advisability of fully correcting high degrees of myopia. An adult having 4 D. or more of myopia has an under developed ciliary muscle. If a full correction is worn at first, this weak muscle is forced into unwanted activity, and symptoms of eye strain follow. The accommodation becomes spasmodic, and rests upon the convergence, causing esophoria. The only safe way is gradually to increase the strength of the glass as the ciliary muscle grows to its work.

The Technique of Polychrome Tattooing. Holth's experiments in tattooing show the following substances to be best for the corresponding colors: For black, lamp-black; for red, cinnabar; for brown, a mixture of cinnabar, sienna and sepia; for yellow, raw sienna; for blue, sepia, green and ultramarine; for gray, powdered graphite; for white. Chinese white. The pigments should be sterilized by heating to 150° C, in hot air.

The Mosquito which is the host of yellow fever, is the stegmyia fasciata; with the aid of a magnifying glass one can easily see the marking like a lyre on the back of the thorax and the white spots on the legs.

Anopheles, the host of malaria, rests and also stings with its body at quite an angle—with its tail in the air; its proboscis is thrust into the victim almost in a line with the axis of its body, instead of at right angles.

Stains of Argyrol upon linen or cotton cloth may readily be removed by washing with a solution 1-2000 of bichloride of mercury.

Bacteriologic Examination for Eye Infection. "While the really savage infections command our greatest care, perhaps we pay too little attention to the less severe ones, whose potential power for evil may be equally great." After everting the lid, a small swab, which had been sterilized at 150° to 160° C. for one hour, was gently pushed down into the purulent material in the lower cul-de-sac, or used to pick up bits of discharge from the conjunctival surface, great care being taken not to touch the lashes or the edge of the lid. Dry secretion in the inner canthus was avoided. In case of styes, abscesses, etc., after carefully cleansing the surface the swab was pushed into the incision." Dr. Dorland Smith's usual routine was to inoculate culture tubes from this material and so make two smears, staining one with methylene blue, and one by Gram's method and safranin, or weak carbol fuchsin. In making smears, the pus-covered swab was rubbed very gently over a clean slide, which was allowed to dry in the air before fixing in the flame. Two or more cultures were regularly made, one on agar (reaction + 1.0 to phenolphthalein), and one either Læffler's blood serum. or a similar medium in which human ascitic, pleuritic, or hydrocele fluid was substituted for the serum. Such of the organisms as grew on either of these media, and were also present in any considerable number in the smear were isolated on agar plates or by successive strokes on blood serum, and their colonies studied. The pure cultures thus obtained were grown on other media and identified by the usual methods.

"Of the 65 cases of conjunctival infection 38 (about three-fifths) were caused by four common germs, 14 by the staphylococcus, 12 by the pneumococcus, 6 by the gonococcus, and 6 by the diplobacillus. In the remaining 27 cases no one organism was especially prominent. Of the 10 corneal cases, the streptococcus occurred in 4, the staphylococcus aureus in 2. Of 10 lacrimal cases, pneumococci and streptococci were present in 7. In 10 cases no organisms of any kind were found. The organism most prominent in the smear is the one most likely to be a factor in the etiology of the infection. Whether in any particular case, however, it actually represents the infecting agent is by no means certain."

In the selective use of remedies based on the kind of organism present, we have much to learn. Zinc chloride is valuable against the diplobacillus, antitoxin against the Klebs-Læffler, and mercury in focal infection with the staphylococcus. How and why vaseline is so helpful in infectious cases we do not yet know. Argyrol acts better than protargol because it is not astringent and does not coat the germ with a protective covering as do other remedies.

For Detached Retina. Dr. Thomas M. Stewart injects dionin once, or repeatedly, if the case proves obstinate; he has not known it to cause intraocular inflammation. The reaction is sometimes very violent, but controlled with cold applications. The results seem to be as good in old as in recent cases. He dissolves one or two centigrams of dionin in one dram of normal saline solution, stirring because it takes some time to dissolve. The patient is put to bed, and allowed up in about a week or when the ophthalmoscope shows reattachment.

Potassium Chlorate for Mouth Disinfection. Potassium chlorate has been recommended as a tooth powder and disinfectant of the mouth It is used with the brush as any other tooth powder, forming a paste with the saliva, the mouth being thoroughly rinsed after its use. A slight salty taste, which is not unpleasant, remains in the mouth. This destroys the bad smelling products of decomposition from food retained in the cavities of the teeth.

If the mouth is sore, or there are fissures in the lips, the pure potassium chlorate may be painful, in which instances a 50 per cent. paste with glycerine and carbonate of calcium may be used.

Sterilizing Sponges. Thirty-seven grams of ammonium persulphate are dissolved in 950 cubic centimeters of pure distilled water and eleven cubic centimeters of strong hydrochloric acid are then added. When first made up the mixture has no very extraordinary germicidal powers, but in the course of a few days these become very pronounced, and when six days old the mixture will kill anthrax spores in less than one minute. It retains its efficiency for many weeks. It is a perfectly clear, colorless solution, with no staining powers and no injurious action on the skin, though it may fix blood stains in the crevices of the nails. For bleaching a sojourn of two or three days in the mixture is requisite. For mere sterilization an hour is ample; the sponges should then be rinsed in sterile water and stored in carbolic solution. This is advisable because the persulphate does exercise a certain injurious effect on their texture. If they are kept soaking in the mixture for three or four weeks they become softened and eventually disintegrate. The persulphate mixture should have been made up at least four days before use, but preferably not more than a month. This method does not do away with the necessity for preliminary mechanical cleansing of the most thorough kind to get rid of all fibrin and other organic matter in the interstices of the sponge. The expense is slight.

Coryza in Infants paves the way for otitis, gastrointestinal disturbances, pneumonia and cerebrospinal meningitis. K. Vohsen (Berliner klinische Wochenschrift, October 2, 1905) inserts a rubber tube about 25 centimeters long, with the nose and cut slanting, into one nostril and blows air into the nostril under moderate pressure from a rubber bulb or the mouth [!]. Infants and small children usually resist and scream when the tube is being inserted, and this closes the entrance into the air passage below, so that the air blown in pours out at once through the other nostril. The air douche is always given on the side that is closed the most. It is repeated before the child is fed; the secretions escape with the air, and are thus blown out through the other nostril. The same procedure will be found a great help for older children when there is difficulty in blowing the nose. In one instance the author was thus able to release and to evacuate in the most gentle manner a complete fibrinous cast of the nose and nasopharyngeal space in a case of diphtheria in a child of two. Nothing has ever been noticed suggesting danger for the middle ear from this air douche; it "has never failed to relieve the obstructed condition of the nose in young children when the latter is due merely to an acute infection."

Radium, at the hands of Cohn, has cured three cases of trachoma. One mgm. in a glass tube was applied for 10-15 minutes daily over each granule; the cure was painless, rapid and permanent. It may also be used in the form of Lieber's coated rods, etc.

Bichloride of Mercury dissolved in normal saline solution in the desired strength will not be so irritating to the nasal or other mucous membranes as when dissolved in pure water.

The History of a Discharge From an Ear appearing a few days to a few weeks after the beginning of a slowly developing deafness in that ear, unaccompanied at any time by pain, is suspicious of tuberculous otitis media.—Am. J. of Surg.

Severe and Repeated Headaches may be due to the unsuspected presence of otitis media, with or without mastoiditis.—Am. J. of Surg.

Subiodide of Bismuth dusted on an oozing granulating wound promptly stops the bleeding. It is also an excellent stimulant to the growth of epithelium.—Am. J. of Surg.

To Preserve Soft Rubber for an indefinite time dip the tube, instrument, etc., in aqua ammonia diluted with ten parts of water. The ammonia bottle should have a rubber stopper.

Oil Soon Ruins Rubber; it should be washed out or off with soap and water immediately after use.

### SOCTETIES.

#### TO ATLANTIC CITY IN SEPTEMBER.

T is hoped that every physician, who can, will visit Atlantic City to attend the joint session of the American Institute of Homocopathy and the International Homocopathic Congress.

The meeting commences Monday afternoon, September 10th, in Atlantic City, N. J., America's most famous watering place. A city of hotels and boarding houses, where the most fastidious can secure rooms either single or en-suite, with or without bath, or where one can secure rooms and live either on the American or European plan.

Special rates have been secured at the most prominent hotels for members of the Institute and Congress and their families by the local committee of thirty-two, who are working night and day, shoulder to shoulder, for the success of the meeting. They have made extensive arrangements for entertainment, meeting rooms, committee rooms, sectional rooms, press rooms, exhibition rooms, and meeting rooms for the ladies. Everything is being arranged for by the various sections of the local committee, so that nothing will be left undone.

There will be a public reception on Monday evening, on one of the five piers of which Atlantic City is justly proud.

An alumni conclave will be held one evening, a smoker on one evening and a banquet on Friday evening for everybody.

Opportunities for sailing, fishing, bathing and automobiling are excellent. Not the least of Atlantic City's attractions is the world's famous board walk, built in 1896, at a cost of \$150,000, four miles long, forty feet wide, and recently widened to sixty feet for nearly two miles of its length, giving ample opportunity for enjoying the ocean breezes.

Should any member of the Institute wish any information, the press committee, consisting of five members of the local committee, will be glad to give any information they can.

Committee: Dr. M. S. Lyon, Dr. J. T. Beckwith, Dr. G. G. Jackson, Dr. A. W. Barnes, Dr. W. G. Gardiner, Atlantic City, N. J.

### INSTITUTIONS.

CUMBERLAND STREET HOSPITAL, BROOKLYN, NEW YORK:

N the 4th of April, after the quarterly meeting of the staff, a pleasant dinner was tendered Health Commissioner Dr. Eugene H. Porter, of N. Y. State. The staffs—visiting, consulting, assistant and house, with some Manhattan guests—filled the room.

Dr. Porter spoke of the work done and to be done by his department, and paid tribute to the 1,400 health officers who never fail to respond loyally to his calls upon them. It was scarcely necessary for him to assure his hearers that as health commissioner he does not think of himself, or of any one who comes before him, as a homoeopath or not a homoeopath.

Dr C. B. Bacon. Superintendent, gave the figures for the 3½ years; from the re-opening of the Brooklyn Homocopathic Hospital as a branch of the Kings County Hospital, July 1, 1902, to December 31, 1905; 9.327 patients were admitted. Over 300 a month were treated on the average. 5,500 ambulance calls were responded to. 65 per cent. being taken into the hospital. There was an average of over fourteen births a month. 783 major, and about 3,000 minor, operations were performed. The out-patients averaged 1,766 a month. The visiting staff made 3,900 calls, and the assistant staff 2,213.

The daily average number of patients is now 206; for a number of weeks from thirty to fifty floor beds have been required every night. During the  $3\frac{1}{2}$  years the deaths, including ambulance and moribund cases, were 18.8 per cent.; 58 per cent. recovered; 23 per cent. were discharged improved, and 0.2 per cent. unimproved.

New buildings for the nurses, etc., and to double the ward capacity are urgently needed. A fine mortuary, a laboratory and an ambulance stable, second to none, have lately been completed.

The visiting staff consists of: Drs. W. W. Blackman, O. S. Ritch, N. Robinson, G. C. Jeffrey, surgeons; John L. Moffat, H. D. Schenck, A. G. Warner, oculists and aurists; Clark Burnham, W. H. Pierson, gynæcologists; W. B. Winchell, W. S. Rink, B. W. Bierbauer, M. T. Hopper, W. H. Aten, Amos Ritch, physicians; W. M. Butler, neu-

rologist; W. C. Latimer, T. A. Buys, obstetricians; H. B. Minton, F. E. Risley, pædologists; W. L. Love, H. E. Street, dermatologists; E. Rodney Fiske, Herbert C. Allen, pathologists; F. T. Van Woert, oral surgeon.

Assistant staff: G. H. Iler, R. F. Walmsley, S. W. Pallister, R. I. Lloyd, J. T. W. Kastendieck, Clinton Willis and W. H. Price.

House staff: R. B. Nattrass, D. M. Shoemaker, C. K. Deyo, C. K. Geiser, H. A. Sanders.

Consulting staff: W. S. Searle, J. Lester Keep, Edward Chapin, D. Simmons, H. J. Pierron.

### BOOK REVIEWS.

A Manual of Materia Medica, Therapeutics and Pharmacology. With Clinical Index. By A. L. Blackwood, M. D., Professor of Materia Medica and Clinical Medicine in the Hahnemann Medical College, Chicago. 592 pages. Flexible leather, gilt edges, round corners, \$3.50. Postage, 6 cents. Philadelphia: Boericke & Tafel, 1906.

A handy little book of much value. The common as well as the officinal name of—it seems—every drug is given that we have ever heard of, and a good many more, among them we are pleased to find vanadium and quercus albus. Mullein oil is omitted. Following the description and homœopathic preparations are the physiological and maximum doses of such remedies as are official U. S. P.; then we have the physiological action. and under "therapeutics" the cardinal indications.

In the chapter on homoeopathic therapeutics the writer apparently prefers Boericke & Tafel's Pharmacopœia to that of the Institute. No mention is made of succussion, the menstruum is "added" in the preparation of the potencies. In describing the preparation of the 1st centesimal potency from tinctures of the 1st and 3d classes 99 minims of dilute alcohol are "added" respectively, to 2 minims of half drug power tincture, and to six minims of 1-6 drug power tincture.

We emphatically protest against the perpetuation of the antique German term "mother tincture;" it is not a discrimination from other tinctures, but tends to perpetuate the idea, still too prevalent, that all

fluid preparations are tinctures.

Machine made trituration tablets are strongly condemned, as that requires the addition of some adulterant, such as talcum powder, boric acid, etc.

A four-page chapter on prescription writing omits the gram (or, as we think it much safer for legibility to write, gramme) and its ob-

breviation gm. A. A. is given for the abbreviation of ana, instead of the more usual aa.

A fine chapter on the management of cases of poisoning occupies the next thirty pages; following a general discussion, each of the prominent poisons is described with the fatal dose and the period and the symptoms and treatment. Carbolic acid is antidoted by vinegar (acetic acid), which is safer to administer to a child than is alcohol. Two ounces of a 4 per cent. solution of formaldehyde have caused death with symptoms similar to alcohol. If it has been swallowed treat as for acute alcohol poisoning; if inhaled, give inhalations of ammonia very cautiously.

Among the symptoms of hydrocyanic acid we would emphasize a very

slow pulse.

In the materia medica note that phaseolus nana is mentioned but not P. vulgaris, which (the kidney bean) was proven by Cushing—and others—nor is the slow pulse alluded to which is such a marked indication.

Among the indications for kali phosphoricum we miss neuralgia and the offensive thin otorrhea.

Staphysagria receives no credit for its magnificent work in neuralgia

associated (usually) with decayed teeth.

The book is very well indexed; fifty-one double columned pages are occupied by the Clinical Index, and eighteen more by the General Index.

THE OPHTHALMOSCOPE AND How TO USE IT. By JAMES THORINGTON, A. M., M. D., author of "Refraction and How to Refract" (third edition) and "Retinoscopy" (fourth edition); Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine, etc. Seventy-three illustrations, 12 colored plates, 298 pages. P. Blakiston's Son & Co., Philadelphia, 1906.

One of the best books of the kind within our knowledge. Every medical student and general practitioner should familiarize himself with the opthalmoscope as he does with the stethoscope and other instruments of diagnosis. This handy volume treats this branch of physical diagnosis systematically, clearly and practically; makes it easy one would think upon reading it. The arrangement is facile, index rich and illustrations excellent.

We are very glad to note that Dr. Thorington specifies that the colored drawings of the eye ground were made by "artificial light." and must be viewed by similar light, not by daylight, lest a wrong impression be formed of the color. By artificial light he meant the yellow light of the incandescent electric lamp, gas, candles or lamps; the arc vacuum electric lights, daylight and gas mantles are too white in color. In the next edition—which we venture to predict will soon be forthcoming—it is to be hoped that the observer will be warned of

the best distance at which to hold these colored eye grounds from the "single" eye in order to simulate examination of the patient; a more vivid idea of the size of the disc, vessels, etc., can thus be obtained.

The causes of the various conditions are given, and prognosis and treatment touched upon. The ophthalmoscope reveals conditions which signify disease of the brain, spinal cord, heart, kidney, blood, blood vessels, etc.; nephritis and diabetes not infrequently are first discovered with the ophthalmoscope.

It is much to be regretted that our author did not—like Professor Copeland—discard the inaccurate terms astigmatism and astigmatic; difficult as that is to the 'customed tongue, it is entirely practical in a

text-book, and is only justice to the students.

Another, and inexcusable, failure is that to save the student using this text-book the confusion so prevalent about hemeralopia and nyctalopia. These terms signify opposite symptoms. On page 211 retinitis pigmentosa has given as a synonym its most prominent symptom—night blindness; but in parenthesis we find the wrong name given to this—it should have been nyctalopia, from the Greek nux (night), alaos (blind). ops (eye). Rank carelessness assumes that the 1 in hemeralopia is only euphonic; it really (see Dorland's Illustrated American Medical Dictionary) is derived from alaos, blind—hence hemeralopia is day blindness, when one sees better in the dusk or even in the dark.

BLAKISTON'S SECTIONAL MANIKINS. One volume, cloth, octavo, \$3.00,

net. Philadelphia: P. Blakiston's Son & Co., 1905.

This handy volume is better adapted for explaining to curious patients the regional anatomy of the head, throat, eye, ear, nose, lungs, heart, stomach, liver, kidney, foot and hand than for accurate study of the anatomy of these organs. Each of these twelve manikins is accompanied on the opposite page, with a numbered explanatory key. The flaps, printed on heavy, durable cardboard, are printed on both sides, and exhibit the deeper structures as they are unfolded.





### The Homeopathic

### Eye, Ear and Throat Journal.

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### EDITORIAL.

#### ASTIGMIA AND HEMERALOPIA.

Y iteration and reiteration are reforms usually accomplished; as nothing succeeds like success they gather headway as they near accomplishment. Two factors encourage us in the belief that the end is not so far off in the campaign for astigmia.

In the December, 1895, issue of the Annales d'Oculistique appeared a brief paper by Dr. Georges Martin, who clearly and conclusively showed that the Rev. Mr. Whewell made a mistake when he gave the name astigmatism to this newly discovered error of refraction. The Greek word stigma, atis, means a point in the sense of a prick, a mark; had he consulted the next word in the lexicon for an expression of the fact that parallel rays do not come to a focus, he should have chosen stigme, es, which means a mathematical point. The English word from this should be—with alpha privative—astigmia, just as aphonia is formed from phone, sound. We should also say astigmic instead of astigmatic if we would be accurate and scholarly members of one of the learned professions.

For ten years the writer has been insistent, in season and out of season, that this error should no longer be perpetuated, and he was gladdened the other day by the receipt of the following letter from Dr. C. A. Oliver, of Philadelphia:

21st April, 1906.

JOHN L. MOFFAT, M. D., 1136 Dean Street, Brooklyn New

Brooklyn, New York.

Dear Doctor:

I thank you very much for your kind expression in reference to the use of the term "astigmia," which has been so strenuously fought for for the past several years, and which I have been teaching my classes for the past three years. \* \* \*

I remain, very truly,

CHARLES A. OLIVER.

The late Dr. Swan M. Burnett wrote on March, 1904, "I am pleased that you have adopted 'astigmia.'"

Dr. Sayer Hasbrouck wrote: "I am heartily in sympathy, as I always have been, with your efforts to correct the spelling of astigmatism. Years ago Dr. Jackson took up this subject in one of the ophthalmic journals, and tried hard to convince the world of the error of its ways, but he evidently has resigned himself to a mere statement—'astigmatism or astigmia'—not even offering a plea for the latter in his text-book."

The second fact alluded to in our opening paragraph is the adoption of astigmia, with no allusion to astigmatism, by Professors Royal S. Copeland and A. E. Ibershoff in their admirable book on Refraction, lately published.

With each year there is noticeable an increasing number of ophthalmologists who are using astigmia in their papers, discussions and conversation.

From force of habit the old term is apt to slip from the tongue—at least at first; but this is readily corrected when writing, and is no excuse for lecturers, teachers, authors, reporters, reviewers, editors, secretaries, and especially lexicographers.

Dorland's American Illustrated Medical Dictionary is the only dictionary that we have seen which gives astigmia: he makes the mistake of allowing the inference by his statement "same as astigmatism." that it is from the same root.

This reform is coming! The teacher who ignores it is unjust to his students. So with the writer of a text-book or of a dictionary.

Let every secretary give notice on the floor of his society that he will make this correction in the MSS. that pass through his hands.

Every editor should do the same—as we here repeat for this JOURNAL—and in addition give credit or admonition, as to this, in every book reviewed; he should also see that a marked copy be sent to the writer who is thus commended or criticised.

For years there has been such general confusion as to the terms hemeralopia and nyctalopia that the text-books and manuals give them as synonymous; whereas they mean directly opposite conditions. Dorland's Dictionary is the only one which explains the difference between these words.

Nyctalopia, from the Greek nux (night), alaos (blind), ops (eye) means, plainly, night blindness. The opposite condition, when the patient sees better in the dusk, is indicated—or should be by careful writers—by the term hemeralopia: from hemera (day), alaos (blind), ops (eye).

What could be plainer? What right have we to ignore the syllable al? How many students have worried over these symptoms because their teachers failed to differentiate them and their names clearly?

One professor has promised to rectify this in the next edition of his book.

The influence of the daily papers is seen in sermons and medical writings in such terms as "to prevent of," preventative, and we might almost add—remember of; it is one of the duties of every cultured man and woman to exert an influence for the refinement and purity of our language. Carelessness is as bad as, nay, is more inexcusable than, ignorance.

### HELP SAN FRANCISCO.

Nother pages will be found letters from Drs. James W. Ward, Rice and Peterson, of San Francisco, and from the "Meissen of California," an organization of the women in the families of members of the California Homocopathic Medical Society, which will distribute contributions to any destitute homocopathic physicians of San Francisco.

Every homoeopathic physician of that city was burnt out, and must be in need of instruments, books, medicines, etc., as well as of money, and not only promptly, but for quite a while to come. With home and office and their clothing, equipment, accounts, case records, instruments, medicines and books destroyed, the resumption of practice would seem almost impossible even if patients of any kind demand the doctor's care, and for months to come he will be fortunate indeed who can make any collections to amount to anything. Most of us have instruments, books, medicines, etc., which we can spare; let us pack carefully such as can be of service and forward them without delay.

Thousands of dollars have already been sent by the homoeopathic physicians of New York state, and by members of the American Institute of Homoeopathy—indeed from all over the country—with unprecedented spontaneity, but more will be needed, and for some time to come.

Before long letters from San Francisco and Oakland will tell of what has been accomplished in the way of relief of our fellow practitioners and what is still needed.

It will be best to send money and supplies for the homoeopathic physicians to Dr. James W. Ward, 2700 Broadway, San Francisco; he is health officer of the city, and has exceptional facilities for distributing them where they are most needed. Dr. D. G. Hallett, 128 W. 85th street, New York, sends him the money contributed by the homoeopaths of New York state—already nearer \$2,000 than one thousand.

At its May meeting the New York County Homoeopathic Medical Society voted to appeal for medicines, instruments, supplies, books, etc., to be sent to Smith's homoeopathic pharmacy, 33 W. 24th street, New York, where they will be packed under the supervision of a committee of the society and forwarded by Wells, Fargo & Co.

These should be sent at once; each of us will find we have more than we supposed. Even the second hand things, if in good condition, will be acceptable until our brothers feel they can spare money from the necessities of living for the refitting of their offices.

Homœopathic materia medicas, repertories, monographs and even practices are valuable, although printed years ago.

Dr. Hallett announces that less than 175 responses have been received from the 1,350 circulars he sent throughout the state; those that came back he sent to various manufacturers of physicians' supplies, one of whom sent a check for \$150.

### THE TECHNIQUE OF CATARACT EXTRACTION.\*

A. B. NORTON, M. D.,

### New York.

HE individual methods of operating the editor has rightly considered of interest to all of us, and in compliance with his repeated solicitations the writer gladly contributes his quota.

Before speaking of my operative technique, just a word as to the operation I am now making. In 1899 I presented to the Hom. O., O. and L. Society a report of fifty consecutive cataract extractions made in the preceding three years. Of these thirty-two were made without an iridectomy, the so-called simple extraction, and eighteen were made with a preliminary iridectomy. My earlier cataract extractions had largely been made with a preliminary iridectomy, and the period covered in the above report was about the time I was beginning to make extractions without an iridectomy, or, at least, represented practically my first experience with this operation. A comparison of the two methods in this series showed about the same ultimate results. To be sure the unfavorable cases were all made with a preliminary iridectomy.

At the time of presenting that paper my personal preference was strongly in favor of the extraction without an iridectomy in all cases of matured, uncomplicated cataracts, because perfect results with this operation leaves such a beautiful eye, that it seemed to be the ideal operation. After quite a free and general discussion upon that paper I asked Dr. Charles M. Thomas (who was present and had taken no part in the discussion) his experience with the two methods. Dr. Thomas replied to the effect that he had had no experience, that he had made cataract extraction almost exclusively with a preliminary iridectomy. That in complicated cases it was universally conceded that extraction with a preliminary iridectomy was the safest opera-

<sup>\*</sup>Written expressly for this JOURNAL.

tion. That he considered it his duty to give his patients the operation tion that would insure the greatest chance of success.

I, like probably all others, had recognized the truth of Dr. Thomas's point, but it had never appealed to me as it did after his statement. It occurred to me then that if Dr. Thomas, one of our ablest and most skillful operators, felt that "in the interests of his patients he had no right to depart from the safest method by the preliminary iridectomy" no more had I.

From that day I have made but one operation by the simple method, and that one was made, under protest, at the Buffalo meeting of the O., O. and L. Society. That operation, upon one whom I had never seen before, under surroundings strange to both of us, was made a failure after the lens had been removed, the iris replaced and the eye ready for the dressings by the sudden squeezing of the lids by the patient. Of course, this accident could not be attributed directly to the simple extraction except that the longer manipulation, to remove cortical substance, had resulted in the loss of the patient's control that might have been avoided had a previous iridectomy been made.

I, therefore, wish to express at this time my gratitude to Dr. Thomas for his remarks seven years ago, which caused me to return exclusively to the old methods of extraction with a preliminary iridectomy.

Now as to the subject proper of this paper, my method in cataract operations.

First. The preparation of the patient is practically the same both for the iridectomy and the extraction. One instillation of a 1 per cent. solution of atropin is made the morning of the operation. The patient is given a bath and the head and face thoroughly washed with coap and water. Just previously to the operation the face is thoroughly scrubbed with corrosive sublimate. I to 4000, great pains being taken with the eyebrows and eyelashes, and a wet compress of the bichloride solution kept over the eye until the operation. Three or four instillations of a 4 per cent, solution of cocain are then made at five minute intervals.

While the cocain is being instilled the surgeon and assistant are thoroughly cleansing their hands and nails, and the instruments are made sterile. My knives are always laid in absolute alcohol, preferably, for thirty minutes; before being used they are dipped in boiling water—all other instruments go through the sterilizer.

The patient is now placed on the table, the bichloride compress

removed, and the eye thoroughly flushed out with a I to 4000 bichloride solution, then two or three drops of adrenalin are used, and the operation proceeds. In the preliminary iridectomy it is our aim to remove only a very small section of the iris. For this purpose a small angular keratome is used, and the incision made well back of the corneo-scleral margin, care being taken to see that the cut edges of the iris are back in place, and that the lips of the incision are entirely free from any clots of blood or other substances. It is my custom to steady the eye with the catch fixation forceps until the knife is withdrawn, then the assistant steadies the eye with the forceps while I draw out the iris with curved iris forceps with one hand and cut the iris with the other. Tiemann & Co. have recently made for me a pair of iris scissors with short blades and bent at an angle that permits their being used over the bridge of the nose, which I have found very useful in cutting the iris.

If the iris should be caught in the wound it is carefully replaced with the spatula or drawn out and cut off. All shreds or particles of any kind are removed either with the spatula or iris forceps, or are washed out with a boric acid solution. The dressing of the eye is the same as after the extraction, and will be referred to later on.

The patient then walks to the bed where he is kept for twenty-four hours, when the dressings are removed and left off from the unopened eye. Atropin, I per cent.. is instilled into the operated eye, which is again redressed, the patient allowed to get up, and on the third or fourth day the eye uncovered and returns to his home.

Two weeks after the iridectomy, as a rule, all irritation has passed, and the patient returns for the extraction. For this operation the patient enters the hospital the day before, so as to become accustomed to the bed and surroundings, and in order that the bowels may be emptied.

The same preparation as already described is followed out. In operating I have used for years a modification of the old Graefe knife in which the blade is made broader and shorter than usual. The puncture and counter puncture are both made back of the clear cornea in the corneo-scleral margin. The cystotomy, or opening of the capsule, is made by a peripheral incision involving about one-third of the circumference of the lens. The speculum and fixation forceps are always removed after the division of the capsule, and while the assistant draws down the lower lid (with great care to make no pressure on

the eyeball), a firm hold of the upper lid at the ciliary border is taken with the index finger of the left hand, so as to prevent its closing with danger of catching the corneal flap. On the first sign of the patient's squeezing the lid is allowed to close over the eye and less damage is done than would occur if the speculum was in place.

A hard rubber spoon is then applied to the lower border of the cornea and pressure is slowly made downward and backward to tip the lens on its axis, and as it presents at the incision is gradually followed up with the spoon, the pressure growing less as the lens advances. My freedom from loss of vitreous I attribute to the especial effort to make no unnecessary pressure and no haste; allow the lens to gradually and slowly slip through the lips of the incision.

All the cortical substance that can be easily coaxed out is now removed, but I do not risk loss of vitreous by too long or forcible efforts to remove all particles of cortex remaining in the eye, for, as a rule, this will largely absorb or can be more safely remedied by a subsequent discission.

The final step of cleansing and dressing the eye is one to which I devote especial care. First, note carefully that no edge of the iris, particle of lens substance, clot of blood or other foreign matter is caught in the wound. If there should be it must be carefully removed (or, in case of the iris, stroked into place) with a spatula, picked up with the iris forceps, or washed out with a boric acid solution. The eye is then thoroughly flushed with the same solution until absolutely free from all foreign substances. A square of sterilized gauze, wet in a I to 4000 solution of bichloride, is laid over the closed eve, and upon this a layer of absorbent cotton soaked in the same solution. dressings are applied saturated with the bichloride solution, and not as I have sometimes seen, with the solution carefully squeezed out, leaving a dry, solid compress. The object of the wet dressing is that when laid lightly over the eye it molds itself to the eyeball, making gentle and uniform pressure to all parts. Over this a second layer of dry absorbent cotton is placed, and the whole held in place by two strips of adhesive plaster. The adhesive straps extend from the check to the forehead over each side of the dressing. Never across them over the eye, or make any pressure upon the eyeball, simply hold the dressing in place. The object in all dressings is to form as light a splint or support to the eye as possible. This dressing has practically

supplanted all other protection to the eye in all my work, except in rare cases when the compress bandage is used.

It is aseptic, light and agreeable to the patient, quickly and easily removed with the least disturbance to the eye, and, in my opinion, is the best all around dressing I have ever used.

From the operating table the patient is carried to the bed, and instructed to keep on the back, if possible, for forty-eight hours, then given more freedom to turn in bed to the unoperated side, and is usually up on the fourth or fifth day.

As a rule, the first dressing is not removed for four days, when the eye is simply opened sufficiently to note the amount of general redness, if the anterior chamber is re-established, and if the pupil is at all contracted. This can all be taken in at a glance, and, if favorable, the eye is not disturbed to examine the wound until the sixth day.

Atropin is instilled at the first dressing, on the fourth day, and not used again unless iritis demands. My experience has led me to keep the eye at rest as much as possible, and I have come to the conclusion that the early and frequent use of atropin is unnecessary.

The dressing is left off from the unoperated eye on the fourth or sixth day, and a day or two later from the operated eye, which, then, is protected with simply a light drop pad, and the patient discharged from the hospital, usually from the tenth to the fourteenth day.

In this paper much attention has been given to simple everyday details, but my success in cataract extraction I attribute largely to attention to details. Never try to extract rapidly, always make gentle manipulations, use great care in thoroughly cleansing the eye after extraction and in applying the dressing. Keep the eye quiet after the operation by avoiding too early and frequent examinations and too much treatment.

In closing, I would say that since giving up the simple extraction my experience has been that of Dr. Thomas: "I give next to no thought to my cases after extraction; they cause me no anxiety. I am never called upon hours or days after the extraction to examine for or replace a prolapse, or do an iridectomy under very unfavorable conditions, perhaps under a general anæsthetic. The healing goes on uninterruptedly, provided the extraction has been done according to the rules of the art."

16 W. 45th Street.

### RELAXING HYPERÆSTHETIC RHINITIS.\*

C. GURNEE FELLOWS, M. D.,

Chicago, Ill.

EVERAL years ago, in the Journal of Ophthalmology, Otology and Laryngology, I wrote a short article on the above head, from which I quote:

"In 1898 Mrs. M. presented herself with the following symptoms: Frequent attacks of sneezing followed by copious flow of thin, watery discharge, the nose being completely occluded and nasal breathing being impossible. These attacks occurred frequently during the day, and at night were aggravated rather than diminished. I had previously had this patient under my care for simple hyperplastic rhinitis, and knew that up to recently she had been in good nasal condition.

"Examination revealed a mucous membrane of normal color, but all the turbinals so swollen that a complete intranasal view was impossible.

"The application of cocain reduced the swelling and revealed fairly normal chambers. Simple local treatment was advised, and arsen. iod. given internally. No improvement was noticed. Various solutions were advised, and naphthaline, allium cepa, nux, etc., were given as seemed indicated, but no improvement was obtained.

"The condition was aggravated by stepping out of bed upon the cold floor, by dust and change of air, but showed no amelioration except when cocain was applied, which, of course, was not allowed for home use, and the patient was ignorant of what gave relief at the time of my examinations. Antipyrin and menthol solutions were more efficacious than the simple antiseptics. Repeated examinations did not reval any new condition, but it seemed only a completely relaxed condition of the turbinated bodies with symptoms of false hay fever.

"After learning that the patient was five months pregnant, and being under a great nervous strain from having recently lost her first

<sup>\*</sup>Written expressly for this JOURNAL.

and only child, I was compelled to believe that it was a neurotic accompaniment of her pregnant state. I did what I could for her, and she accepted the inevitable, but recovered entirely and promptly at the delivery of a living child."

Six years later. This same patient came to me (in 1904) complaining of the same symptoms and demanded relief. I could find no reason for operating upon the nose, and declined to do it. I referred her to various physicians for examination to see if some reflex cause could not be found, and as the patient was very neurasthenic and had some slight heart irregularity, she was treated by a general practitioner, but without improving the nasal condition. After some months she came back and said she was no better, and demanded nasal treatment. Again I refused to give it by way of operation, because the tissue was normal in appearance, except that it was relaxed and soggy, and, according to my judgment, should not be removed. It was possible, however, for her to go to California for a few months, and she went, taking with her a wire nasal dilator, which so opened the nose that she could frequetnly get more comfortable sleep than without it. All this time she had been sleeping upon two or three pillows in order to keep as nearly erect as possible, as the condition was much worse upon lying down, and bothered her comparatively little in the daytime. After her return her condition was as bad as ever, and in desperation she left all her friends of the medical profession that she had known, and went to a total stranger, who found a retroflexed uterus, and after repositing the same, her nose immediately assumed its normal function, her respiration became purely nasal, and the cure was again complete, showing the same intimate connection as a causative agent between the former cause and result as it did in the latter condition.

The case is interesting because of the recurrence, the number of years I have had the patient under observation, and because of her confidence in me in accepting my advice not to allow an operation on the nose.

### CATARACT OPERATION THROUGH FUSED IRIS.\*

CHARLES C. BOYLE, M. D.,

### New York.

E., aged 50 years, totally blind in each eye; the right sight had been lost from an iridochoroiditis, and the other eye had had an iridocyclitis, probably sympathetic in its origin. The pupils of both eyes were occluded by a plastic exudation upon the lens and adhesions to the capsule.

I first removed the right eye because it was the one first affected, and there was no vision nor any chance of having any; the eye was soft. In the left eye the tension was inclined to be a little increased. Later on I made an iridectomy on the left eye, but the opening closed up again by inflammation. After an interval of three or four months I made up my mind to take chances with another operation, which was nothing more nor less than an extraction of the lens.

This operation was made with a von Graefe knife, entering at the corneo-scleral junction, about two mm. above its transverse diameter. After entering the anterior chamber the knife was made to pass through the iris and through the superficial layer of the lens till it made its exit at the opposite corneo-scleral junction; I then cut upwards along the corneo-scleral border to the apex of the course, cutting through the iris at the same time. There was no prolapse of iris, as it was bound down to the capsule of the lens, but the knife had made an opening in it.

The lens was soft, not cataractous, and most of it was removed in pieces. The wound was cleansed, the eye bandaged and the patient put to bed as in any cataract operation. There was some inflammatory reaction, but nothing serious. Letting the eye rest for two or three months I made a capsulotomy, making a very good opening, which remained open. After all inflammatory reaction had subsided I found that with the ophthalmoscope I could obtain a very good view

<sup>\*</sup>Written expressly for this JOURNAL.

of the fundus, which appeared nearly normal, and on testing his vision I was very much surprised to find that with a cataract glass, + 12 D., the patient had a vision of  $\frac{20}{40}$ , and he could read large print with a + 15.

This case shows what can occcasionally be done in cases that from appearances are apparently hopeless. I have found that some of these eves which have suffered from old inflammatory conditions will stand considerable operative interference if you give them sufficient time to recover from one operation before attempting another. These are cases in which there is nothing to lose and everything to be gained; if at all successful, even it in visitual ever so little, it is better than none. This patient was shave been sent to the almshouse as totally blind; he would have seen a care to the city for the rest of his life.

49 W. 37th Street. UL 19 1912

WARNING.

Go 'way, Mistuh Skeeter! Don't you sing dat song to me! I's hyud about yoh doin's; you's as tough as you kin be. You's been aroun' a-lunching on malaria an' things Till you's jes' about as danj'us as a rattle snake wif wings. I didn' use to min' you when you come a-browsin' roun', Ca'se I knowed a slap 'ud send you tumblin' senseless to de groun', But since I hyud dem white folks I's as skyart as I kin be. Go 'way, Mistuh Skeeter! Don't you sing dat song to me! -Washington Star.

In France laundries are controlled by law. Soiled linen is not allowed to be taken to the laundry unless packed in closed sacks or other suitable containers. Upon the arrival at the laundry the container and its contents are disinfected by prescribed methods. Suitable clothing is provided for the workers in the laundry; which clothing is frequently washed and disinfected. Food and drink are not allowed to be taken in the room where laundry is received.

# WHAT ASSISTANCE IN GENERAL DIAGNOSIS DOES AN EXAMINATION OF THE EYES AFFORD, SUCH AS CAN BE MADE BY ANY INTELLIGENT PHYSICIAN WITHOUT SPECIAL SKILL OR TRAINING?\*

E. H. LINNELL, M. D.,

Norwich, Conn.

HE record of the pulse, temperature and respiration, urinary analysis, etc., are among the every day routine methods of diagnosis, but the indications furnished by the eye are too little recognized and too often overlooked. In the present essay I shall not discuss the revelations of the ophthalmoscope, which furnish us most valuable data for the determination of the nature and location of intracranial affections, as well as of various spinal, renal and cardiac diseases, because to use the instrument and to interpret its findings, implies to a greater or less degree special skill and training not ordinarily possessed by the general practitioner. I shall, as my title intimates, confine myself to a consideration of the significance of certain appearances of the lids, of the conjunctiva, cornea and iris, to the behavior of the pupil, and to the disorders of mobility of the eyes, which can easily be recognized.

In examining the lids for indications of general disease it is important to notice the color of the skin, its sensibility, the presence or absence of thickening or cedema, of inflammation of the ciliary margins, of neoplasms, the movements of the lids and the existence of dilatation or contraction of the palpebral fissure.

A pigmentation of the skin of the eyelids accompanies Addison's disease of the suprarenal capsules. In other cases it is symptomatic of uterine or hepatic disease, and it is sometimes associated with abdominal growths. Blue rings around the eyes may accompany menstruation in debilitated individuals, as you have doubtless observed. When they disappear with the cessation of the menstrual flow, the symptom is of no special importance, and does not indicate organic disease.

More or less anæsthesia of the skin of the lids with false localization is a symptom of locomotor ataxia.

<sup>\*</sup>Read before the Worcester County Hom. Med. Society.

A swollen, cedematous, non-inflammatory condition is indicative of nephritis, and should lead one to examine the urine, even in the absence of anæmia, debility and other concomitants of renal affections. It is also present in general hydræmia and in heart disease. It accompanies suppuration within the orbit, but in the latter condition it is sharply circumscribed by the bony edge, and this circumstance will at once distinguish this form of cedema from that accompanying the affections previously mentioned, in which it is not distinctly circumscribed, but gradually merges into the healthy skin of the eyebrow or cheek.

Œdema of the lids is often an accompaniment of trichinosis, and may be an early manifestation of that disease.

Thickening and swelling of the lids may be an early symptom of myxœdema.

Eczema of the eyelids, especially of the ciliary border, is frequently dependent upon a scrofulous diathesis, but in many cases it is caused by eye-strain, and is cured by the prescription of suitable glasses. When neither of the above causes exists, the presence of an obstinate eczema of the edges of the lids should lead to an examination of the urine. for it is a not infrequent accompaniment of diabetes.

Styes, as is well known, are often associated with disorders of digestion and with menstrual irregularities, but they are often also the result of eye-strain, and disappear after correcting errors of refraction.

A tubercular nodule sometimes develops in the tissues of the eyelid, simulating a large inflamed chalazion. (A retention cyst of a meibornian gland.) A knowledge of this fact may be of advantage in treatment. The initial lesion of leprosy may develop in the lid in the form of hard, non-sensitive nodules, of a whitish, pale yellow or reddish color, accompanied with more or less infiltration of the subcutaneous tissue. Anæsthetic, whitish patches may also appear.

In studying the muscular conditions of the lids, both paralytic and spasmodic affections are of diagnostic import. I need scarcely mention the laxity of the skin of the eyelids and the deficient innervation of the Orbicularis, with secondary eversion of the lids, and chronic conjunctivitis and epiphora from malposition of the puncta lachrymalis, which are so frequently seen in senile debility. These only emphasize, when noticed, the need of supporting constitutional treatment and of careful diet to promote nutrition.

A true paralysis of the orbicularis produces the condition known as lagophthalmos, in which the patient is unable to close the lids. It is associated with paralysis of the muscles of the face, owing to their

common innervation by the facial nerve, and indicates the peripheral nature of such a paralysis, for in ninety per cent, of facial paralyses of central origin the orbicularis and frontalis muscles escape. An explanation of such exemption is found in the assumption that the fibres of the nerve which supply these muscles arise from a separate nucleus from that of the rest of the nerve. The possibility of ear disease and of syphilis should be borne in mind.

A paresis of the orbicularis, causing imperfect closure of the lids, sometimes occurs in posterior spinal sclerosis (locomotor ataxia), and should awaken suspicion of this disease.

Diminished frequency of winking from a lack of sensibility of the cornea and conjunctiva occurs in Basedow's disease or exophthalmic goitre, and is known as Stellwag's sign or Dalrymple's symptom.

A spasmodic action of the levator of the upper lid (Abadie's sign) is another symptom of Basedow's disease. Von Graefe first called attention to another characteristic feature of this affection, viz., a spasm of Muller's muscle. This consists of a few unstriped muscular fibres in the cellular tissue of the orbit, innervated by the sympathetic. contraction causes a widening of the palpebral fissure, and interferes with the associated movements of the eyeball and the lid. noticed in looking downward, when the lid lags behind, so that a white stripe of exposed sclera is seen between the edge of the cornea and the lower lid. This is a characteristic symptom of exophthalmic goitre, and together with Stellwag's sign, gives the peculiar staring expression to such patients, and renders the exophthalmos more noticeable. Graefe's sign is an almost invariable one. It occurs early in the disease, and may for a time be the only feature of the case. It may affect only one eve, or be more marked on one side. In testing for this sign it is well to have the patient lie on his back. His gaze should be directed to some object held at first directly above his face, and then slowly moved downward toward his chest, when the deficient movement of the upper lid becomes apparent.

The opposite symptom, that of narrowing of the palpebral aperture, was described by Jackson as a symptom of post-spinal sclerosis, and is caused by an opposite lesion; a paralysis intead of an irritation of the sympathetic. It is sometimes designated as a sympathetic ptosis.

A spasm of the orbicularis is, in the majority of cases, an expression of photophobia, when not associated with inflammatory conditions; its cause may sometimes be eye-strain from refractive or muscular anoma-

lies. When no such explanation is found, it may be a reflex neurosis from a sexual or intestinal irritation.

Spasmodic winking, or nictitation of the lids, may likewise be caused by errors of refraction. It may also precede or accompany general chorea, or by reflex action may be associated with disorders of the digestive organs.

We distinguish various forms of ptosis or inability to raise the lids. It may be congenital due to a lack of development of the levator muscle, or to a central defect associated with a diminished power of raising the globe. There is a so-called morning ptosis, which occurs in debilitated individuals. The levator is relaxed during sleep, and on first waking the individual does not immediately regain the voluntary contraction of the muscle. There is a hysterical ptosis, unilateral or bilateral, and associated with spasm of the orbicularis, which latter is particularly marked when the patient is told to look upward. A true paralysis of the levator may result from a peripheral neuritis, such as occurs occasionally from exposure, from alcoholism, or from a lesion of the third nerve, anywhere in its course from its nucleus of origin to the orbit. It will then be associated with paralysis of the other ocular muscles, except the superior oblique and external rectus, which have other nerve supply. Such an isolated paralysis of the third nerve, thus manifested, unaccompanied by signs of a lesion at the base of the brain, points to a lesion in the vicinity of its origin. Ptosis occurring as an isolated paralysis would point to a circumscribed lesion of the cortex of the frontal lobe of the cerebrum just in front of the fissure of Rolando, and is a valuable point in the localization of cerebral symptoms having this association. Ptosis is also, sometimes an accompaniment of tabes and paralysis agitans.

## CONJUNCTIVAL AFFECTIONS.

It should be remembered that a chronic conjunctivitis is frequently caused by errors of refraction, and when it does not yield to suitable treatment, the nose may, with advantage, be examined for a probable exciting cause.

The phlyctenular form characterized by the formation of small vesicles and pustules on the corneo-scleral junction is often caused by nasal disease. The conjunctivitis which accompanies the prodromal stage of measles is well known, but the same association with the early stage of epidemic cerebro-spinal meningitis is perhaps not so familiarly recognized. Both diphtheria and croup may develop upon the con-

junctival surface of the lids. In each case we have a pseudo-membrane; in the one case interstitial, infiltrating the whole thickness of the lid, which is pale and bloodless from obstruction of the circulation owing to the pressure of the exudate; while in the other case, it is superficial and easily removed, leaving a raw, bleeding surface. The constitutional symptoms also are of diagnostic significance.

Spontaneous conjunctival hæmorrhages are indicative of an atheromatous condition of the arteries, and, especially in elderly people, should suggest the danger of cerebral hæmorrhage and the adoption of precautionary measures.

Such hæmorrhages are not infrequent in diabetes, and they have been observed in cholera patients, and are of serious prognostic import.

A uniform cedematous swelling of the conjunctiva of various degrees of tension, with or without inflammation, frequently accompanies meningitis. The exudation may reach the orbit through the optic foramen, or it may produce a venous stasis and subsequent exudation by pressure upon the ophthalmic vein. Such cedema is an important sign of exudation in the cranial cavity. It is a frequent symptom, both of the cerebro-spinal form of meningitis and of the purulent, basilar form.

An abrasion of the conjunctiva may become inoculated with the bacilli of tuberculosis. This may occur through infection from the nose, skin or lungs, or the initial infection may develop in the conjunctiva in healthy individuals exposed to infection. The importance of recognizing it is evident. An ulcer develops at the point of inoculation, with a hard base often covered with granulations. Yellowish red nodules develop in the vicinity, giving a granular appearance, somewhat similar to trachoma, within which the microscope reveals the presence of the tubercle bacilli.

Leprosy may also originate in the conjunctiva, through the influence of a micro-organism similar in appearance to that of tuberculosis. The primary nodules are pale yellowish or reddish, hard and insensitive, and they increase in size, and invade the adjoining structures.

#### EYEBALL.

The general expression of the eye will rarely escape notice. The bright, lustrous, staring eye in febrile conditions and in mental excitement is familiar to all. So, also, is the dull, expressionless stare of mental hebetude or actual dementia, and less markedly of typhoid conditions, etc.

A protrusion of the eyeball, exophthalmos, is one of the cardinal symptoms of Basedow's disease. It is usually bilateral, but not invariably, or it may be of unequal degree in the two eyes. A protrusion of the eye may also be due to an orbital growth, to suppuration within the orbit, or to an aneurism of an orbital artery, or of the internal carotid. In the latter case the pulsation of the aneurism will be communicated to the eye and be perceptible to the examining fingers. Sometimes also a bruit can be detected by the aid of the stethoscope. Pressure on the cavernous sinus or on the ophthalmic vein may cause sufficient venous stasis to produce protrusion of the eye, in which case it can readily be replaced by gentle pressure.

#### SCLERA.

An icteroid coloration of the sclera when not dependent upon a hepatic disorder is suggestive of Addison's disease of the supra-renal capsules. Rheumatism and syphilis are the most common causes of scleritis and episcleritis. Tuberculosis nodules and syphilitic gummata may develop in the sclera. In doubtful cases the sclera may at times afford evidence of death by the existence of dessicated patches within the palpebral fissure, either at the inner or outer side and below the cornea.

#### CORNEA.

The cornea very readily reveals a constitutional dyscrasia. Ulcers, abscesses and phlyctenulæ of the cornea and cornea-scleral margin are frequent manifestations of scrofula.

A parenchymatous inflammation of the cornea, characterized by a diffuse infiltration in the deeper layers of the membrane, giving the appearance of ground glass, which might be mistaken for a cataract by a careless or inexperienced observer, is very characteristic of inherited syphilis. It most frequently occurs between the sixth and fourteenth years. Occasionally there is a relation of cause and effect between corneal affections and dental caries.

Ulceration of the cornea is not infrequent in diabetes, and is an indication of debility.

It should be remembered that slight corneal injuries in elderly and feeble individuals, which heal readily in healthy persons, are very apt to break down into necrotic suppurating processes, and hence demand special care.

Anæsthesia of the cornea occurs in locomotor ataxia, so that in some cases the membrane may be touched without producing winking. Sometimes also there is a false localization of sensation, so that a touch upon the cornea is referred to the external or internal canthus.

A malarial cachexia may manifest itself by a keratitis. Noyes says: "Keratitis, as a result of malaria, is not infrequent, and presents features which are more or less typical. It attacks by preference the epithelium and superficial layers, is non-suppurative, ulcerations are superficial, and there is often anæsthesia of the surface. The opacity is apt to run in streaks, yet may present itself in patches. One will find marked tenderness of the supra-orbital nerves as they pass out of the orbit which is the most valuable pathognomonic sign."

#### IRIS.

Inflammation of the iris (iritis) always arouses a suspicion of syphilis. Probably one-half of the cases are of a specific nature. The gummatous, condylomatous or papulous iritis characterized by the development of yellow or dirty orange colored nodules, surrounded by a narrow, red zone, two or three millimeters in diameter, warrants a positive diagnosis of this disease.

Rheumatism, or rather exposure in persons predisposed to rheumatism, is perhaps the next most frequent cause of iritis, and when both of these causes can be ignored, diabetes, albuminuria and tuberculosis should be thought of as possible associations.

## BEHAVIOR OF THE PUPIL AND OF THE ACCOMMODATION.

The size of the pupil varies considerably under physiological conditions. It contracts upon the stimulus of light, upon efforts of accommodation and with convergence. It dilates under feeble illumination and upon irritation of the skin, especially of the face and of the back of the neck. The ordinary diameter of the pupils in health is about 4 mm., and a constant departure from this standard is usually indicative of disease. One should remember, however, that the pupils are larger in childhood and smaller in old age than in adult life. This variation is dependent upon the amplitude of accommodation at the different ages. The pupils should be of equal size in the two eyes, and should react consensually and equally to stimuli applied to either eye, or to both. When any inequality exists the one showing the lesser reaction is usually the pathological one.

Inasmuch as the behavior of the pupils is of very great practical significance in the diagnosis, both of the location and the nature of nervous diseases, its examination should be conducted systematically and with great care. The following method is recommended:

It is assumed that any inflammatory condition of the iris, or adhesions to lens or cornea, resulting from previous iritis, is excluded, and that the cornea and humors of the eve are clear. The patient being seated before a window with moderate illumination, the size and form of each pupil should be separately noted, while he is gazing straight before him at a distance. The observation should be made when both eyes are open and when they are alternately closed or shaded, carefully noting any movement of contraction or dilatation, or any lack of uniformity of such movement in the two eyes. The reaction upon convergence and accommodation is now noted by fixing the patient's gaze upon the examiner's finger, which is gradually approached along the middle line to within about eight inches of his eves. To study the accommodative reaction independently of convergence, each eye should be examined separately. The one under examination should be directed straight forward, and the other closed. After looking in this way for a few seconds, he is made to suddenly fix his gaze upon some near object, without altering the direction of his vision. The pupil should immediately contract and dilate again as soon as the object is removed.

The light reflex is best observed by concentrating a pencil or light from an artificial source of illumination upon the pupil by means of a convex lens. and watching the resulting contraction of the pupil.

The eyes are to be separately tested; the one not under observation being shielded from direct exposure to the light, but not closed. The light should be thrown into the eye from different directions, and its intensity varied to test the sensibility of different portions of the retina, and the degree of such sensibility. The test will be more satisfactory if the patient is placed in a darkened room for a few moments previously. Having now discussed the method of examination, let us inquire what may be learned from the results so obtained.

Mydriasis and myosis have no special significance as isolated symptoms, but taken in connection with other symptoms, they are sometimes an index of the nature and location of a morbid process, and the different forms of paralysis and spasm of the muscles of the iris afford very suggestive diagnostic indications.

With both mydriasis and myosis we distinguish a spastic and a paretic variety. Mydriasis, for instance, may be caused either by a spasm of the dilator fibres of the iris, which are energized by the sympathetic nerve fibres or by a paralysis of the sphincter pupillæ controlled by the third nerve, and the converse is true of spastic and paretic myosis.

A thorough understanding of the motor and sensory tracts, along which impressions travel between the cortical centers and the nuclei of origin of these nerves and the iris, is essential for a proper interpretation of these different varieties of contraction and dilatation of the pupils. It would be impossible in a brief essay to consider this subject in detail, and I shall content myself with a brief mention of some of the more obvious inferences to be drawn from an examination of the pupils.

Myosis is a sign of cerebral irritation, and is found in hyperæmia, in mania and conditions of excitement, and in the early inflammatory stages of meningitis, etc. Mydriasis is associated with cerebral anæmia and with conditions where effusion exists and increased intra-cranial pressure, as tumor, hydrocephalus and meningitis with effusion.

Spastic mydriasis occurs in the early stages of spinal meningitis and in spinal irritation.

Myosis is a premonitory sign of apoplexy, and when, during a seizure, mydriasis occurs after a previous myosis, it is an unfavorable sign, indicating increasing pressure. In embolism, in contra-distinction from apoplexy, there are usually no pupillary symptoms.

In concussion of the brain we are apt to find sluggish action of the pupils without marked dilatation or contraction.

Mydriasis is also a premonitory sign of uræmia, and in uræmic and alcoholic coma the pupil is dilated.

Monocular mydriasis and also transient recurrent mydriasis, is a suspicious premonitory sign of insanity and of paresis.

Rapid alternation of myosis and mydriasis is found in tubercular meningitis.

In nicotine poisoning, general paralysis of the insane, and in lesions of the pons varolii we usually find myosis.

The behavior of the pupil during anæsthesia is important, and should be understood and carefully noticed, as it affords a valuable indication of approaching danger. During the early stage, before narcosis is complete, the pupil is dilated and responsive to light. In the stage of

complete insensibility the pupils are contracted and the eyeballs are fixed. Dilatation with reaction to light, returns with returning consciousness. Dilatation during narcosis indicates necessity for caution. Sudden dilatation during complete anæsthesia is an indication of impending asphyxia. The inhalations should be at once discontinued, and every effort made to stimulate respiration and avert impending The concomitants of this form of dilatation serve to differentiate it from that previously mentioned, and to emphasize the danger attending it. They are (1) profound narcosis, in distinction from commencing narcosis or recovery from it; (2) absence of conjunctival and all other reflexes, instead of the presence of contraction upon the stimulus of light, and of other reflexes; (3) stertorous respiration, in distinction from shallow respiration, and efforts at vomiting: (4) fixed. immovable eyeballs instead of mobile. The preceding remarks apply more particularly to anæsthesia from chloroform. With ether, contraction is the rule.

#### THE ARGYLL-ROBERTSON PUPIL.

Usually the reflex contraction of the iris, attending efforts of accommodation and convergence, is lost simultaneously with failure of the light reflex. It is possible for the associated contraction to be preserved, when there is no response to the stimulus to light, and this variety of reflex iridoplegia is known as the Argyll-Robertson pupil, and it is a very valuable diagnostic indication in two forms of nervous disease. The pupil may be of normal size, dilated or contracted, but usually there is more or less myosis. The presence of the Argyll-Robertson pupil demonstrates a lesion affecting the fibres connecting the tubercula quadrigemina and the third nucleus.

Since there is no impairment of vision and no loss of voluntary motion, it is evident that the primary optic ganglia and the third nucleus are unaffected. It is found in locomotor ataxia or tabes dorsalis, and in paresis or progressive paralysis of the insane. It is said to exist in 70 per cent. of the cases of tabes and in 50 per cent. of the cases of paresis.

It is very rare in other diseases, and hence, it becomes a valuable aid in diagnosis, especially as it often occurs very early in these two affections. The peculiar mental condition and the disorder of speech in paresis will enable one to make a differential diagnosis.

#### AFFECTIONS OF THE EXTERNAL OCULAR MUSCLES.

Paralytic and spasmodic affections of the external eye muscles occur with various intra-cranial and spinal diseases, and while they are usually associated with other symptoms which indicate with more or less precision the situation and nature of the lesion, the eye symptoms alone will often furnish valuable diagnostic indications.

A spasm of a given muscle or group of muscles is produced by an irritation of a locality whose destruction causes a paralysis of the same part; hence, an accurate knowledge of the minute anatomy of the origin and course of the ocular motor nerves is essential for a correct interpretation of such muscular phenomena. It is evident that a nerve may be affected near its termination or anywhere along its course, and hence we distinguish peripheral, basilar and cortical ocular motor palsies. Time will not suffice for a detailed discussion of these varieties. The concomitant symptoms will usually serve for a differential diagnosis. It is important to remember in making a diagnosis of a cerebral affection from ocular symptoms that parts remote from the primary lesion frequently suffer temporarily. This is especially true of apoplectic and inflammatory conditions. The permanent symptoms, therefore, are the only ones upon which an accurate localization may be based.

The diagnosis of a total paralysis of an ocular muscle presents no difficulty. It is at once evident by the inability to turn the eye in the direction of the paralyzed muscle, and by the squint caused by the unopposed action of its opponent. It is otherwise when there is incomplete loss of function. Often there is no apparent loss of motion, and the paresis is only manifested by the resulting diplopia. There is inharmonious action of the two eyes, inaccurate binocular fixation. Hence the retinal images are not thrown upon corresponding portions of the retina of either eye, and thus an apparent doubling of the object results. In determining which rectus is affected there are two things to be considered. First, the part of the field in which the doubling occurs; secondly, the eye which sees the farthest removed object. The affected muscle belongs to the eye which sees the farthest removed object, and it is always on that side of the eye towards which the doubling take place.

In a case of hemiplegia, when there is a paralysis of the muscles of one or both eyes on one side, and of the extremities on the other, the

lesion is either in the crus or the pons. A paralysis of one external rectus and of the extremities on the other side indicates a lesion of the posterior edge of the pons. When the hæmorrhage is in one of the cerebral hemispheres the eyes and extremities are paralyzed on the same side.

We cannot state from the presence of an ocular palsy alone whether there exists hæmorrhage, embolism, thrombosis, meningitis, tumor, neuritis, softening, sclerosis or effusion of lymph or pus. Anyone of these may be the cause of existing symptoms, but still these same ocular palsies do often point toward the nature as well as te location of the central lesion.

A sudden lesion developing immediately or within a few hours and causing paralysis, is always a vascular one, either a hæmorrhage or an occlusion. An acute lesion developing in a few days or weeks is probably inflammatory. A chronic one indicates degenerative processes or gradual pressure from a neoplasm.

Ocular paralysis in children without obvious cause is to be regarded as a very serious premonition of tubercular meningitis. In adults ocular paralyses are very suggestive of cerebral syphilis. Von Graefe asserted that one-third of all ocular paralyses are due to syphilis, and the proportion has been estimated as high as one-half. Such a paralysis may be the initial symptom of cerebral syphilis. One variety where several muscles of both eyes are affected successively and transiently, varying in degree and duration, is considered almost pathognomonic of the cerebral form of this disease. Anæsthesia and dysæsthesia of the skin of the face frequently accompanies syphilitic ocular palsies.

It is estimated that from 20 to 60 per cent. of all cases of tabes are accompanied with ocular palsies, which are of sudden development and transient duration with frequent relapses. The symptoms resemble very closely those resulting from syphilis, and it should be remembered that most tabetic patients have at some time been syphilitic.

Multiple sclerosis and general paresis also give rise to ocular paralyses of similar character. Other symptoms will be present to establish a differential diagnosis. A paralysis of both external recti has been noticed as an early manifestation of the latter affection.

Ocular paralyses may be of rheumatic origin, and may affect a single muscle or several. Usually one or more contiguous branches of the nerve are implicated; the superior rectus and the levator palpebræ, for instance. They follow exposure, are associated with other

rheumatic affections, remote or present, and are, as a rule, limited to one eye, whereas ocular paralyses from central disease are usually bilateral.

A progressive paralysis of the different branches of the third nerve or a total paralysis of all the muscles of both eyes is almost conclusive evidence of a nuclear lesion. A tubercular formation, a cyst, an atheromatous vascular degeneration or an embolism of one of the branches of the basilar artery would explain such a condition.

Certain toxic substances, notably lead, alcohol, sulphuric acid, and the fumes of charcoal have produced nuclear ocular paralysis, but more frequently the resulting eye symptoms in such cases of poisoning are due to a peripheral neuritis. Nuclear paralyses sometimes accompany bulbar paralysis, muscular atrophy, tabes and disseminate sclerosis. An acute hæmorrhagic form develops sometimes as a result of excessive use of alcohol, and is usually fatal.

#### SPASMODIC AFFECTIONS OF THE EXTERNAL OCULAR MUSCLES.

It has been previously remarked that spasm of one or more of the ocular muscles is caused by an irritation of the same locality, whose destruction causes paralysis. Hence no further discussion of the localization of cerebral affections, as indicated by ocular spasmodic affection, is necessary. A single muscle or a group of muscles may be affected by irritation of a nerve at its nucleus, or at its cerebral termination. Cortical spasms are always binocular and conjugate.

The secondary deviation of the eyes in cerebral apoplexy indicates the side of the brain affected. The eyes point toward the side of the lesion, unless the hæmorrhage is in the pons or crus, when the eyes and extremities are paralyzed on opposite sides, and the eyes deviate toward the unaffected side of the brain.

There is a clonic spasm of the ocular muscles, known as nystagmus, which is worthy of passing mention. It is an oscillating to and fro movement of the eyes, usually in the horizontal plane, caused by an alternate contraction and relaxation of the internal and external recti.

It may be congenital or acquired in early childhood, when it indicates simply a lack of control of the muscles, which is acquired by the child simultaneously with intelligent vision. As soon as he recognizes objects he directs his eyes toward them, thereby acquiring the faculty of accurate fixation. It is easy to understand that this faculty will be imperfectly developed if vision is too indistinct to create cortical per-

ceptions definite and strong enough to excite the impulse of adjust. ment. Hence opacities of the cornea, congenital cataract. coloboma of iris or choroid, microphthalmos and high degree of refractive error are among the recognized causes of congenital or infantile nystagmus. It develops in persons who use their eyes for long periods with insufficient light, as in miners. When nystagmus develops in adults, who are not engaged in mining or similar occupation, it is a valuable diagnostic sign, indicating the existence of serious organic disease. It affords no evidence of location or nature of the disease, for it has been found associated with various organic lesions in different locations, but it is very significant of serious organic disease as distinguished from a functional disturbance. Gowers, in his "Diseases of the Nervous System." says:

"It is often marked in early degenerative disease when other symptoms are equivocal, and a search for it should never be omitted, and should include always the upward movement of the eyes. It may be trusted without hesitation, and in a large number of cases prevents a mistake in diagnosis.

"It occurs very frequently with multiple sclerosis, and is a characteristic symptom and a valuable diagnostic sign. It is said to occur in 12 per cent. of all cases of this disease. When tremor of the eyes on fixing an object is associated with true nystagmus, we have an additional indication of multiple sclerosis. It has been explained by the assumption of the existence of sclerotic foci in the vicinity of the muscle nuclei, whereby the conduction is interfered with but not abolished. It rarely occurs in tabes or paralysis agitans."

I fear I have taxed your patience in this lengthy paper, and yet I have only hinted at the vast amount of valuable and suggestive diagnostic aids which may be gained by a study of the eye.

43 Broadway.

A New Disease. Dr. Millener has observed a new disease which has appeared among the workers in power houses in or around Niagara Falls. The disease is observable in the case of persons whose employment brings them in the immediate presence of high voltage alternating current, generating or transforming machines. The symptoms manifested are a grave disturbance of the digestive organs, loss of appetite, distress after eating, and a paleness of the complexion.

### SOCIETIES.

MEETING OF MISSOURI INSTITUTE OF HOMEOPATHY AT ST. LOUIS, MO., APRIL 24, 1896. BUREAU OF O., O. AND L.

J. M. Patterson, M. D., Kansas City, Mo., Chairman.

The following papers were read: "Blepharospasm," by Geo. N. Seidlitz, M. D.; "Artificial Drumheads," by Jas. A. Campbell, M. D; "Treatment of Acute Conjunctivitis," by J. M. Patterson, M. D. The following were read by title: "What Is the Relation of a Specialist to the General Practitioner?" by Wm. Woodburn, M. D., Des Moines, Iowa, and "Sinusitis," by C. Joseph Swan, M. D., Chicago, Ill.

Dr. Seidlitz in his paper on blepharospasm went over briefly the description and causes of this condition, saying that in ocular blepharospasm due to conjunctival irritation, defective refraction, or imbalance of ocular muscles, the removal of the cause would readily cure the disease. In cases where such causes did not exist, or, if their removal did not cure, it was often an indication of irritative disease of the seventh nerve within the cranium. Attention was also called to the fact that blepharospasm due to refractive errors is temporarily cured by instillation of atropin, this being a valuable method of differentiation of ocular blepharospasm from spasm arising from other causes.

Dr. N. B. Delamater, of Chicago, in discussing this paper said that the majority of these cases belong to the neurologist, since most of them are due to some cranial lesion, and that this is one of the many conditions in which the ophthalmologist and neurologist are of wonderful assistance to each other.

Dr. J. A. Campbell's paper, "Artificial Drumheads," while a very thorough review of the subject, was not so much written to discuss the benefits to be derived from use of the artificial drum as it was to show that those extensively advertised possess no merit not possessed by those well known to and in constant use by all otologists. He exhibited nearly every kind known to the profession. His conclusions were that practically all benefits derived from any form of drum could be gotten from use of the pledget of cotton, as advised by Yearsley in 1848. He

had in but few instances observed improvement in hearing from any device when the membrana tympani was intact, but much relief was often obtained when there was a large perforation of the mt.

Dr. Seidlitz in discussing the paper said that he had never been able to obtain improvement in any case when there was no perforation of the mt., and that the more distruction of this membrane the better the chances for improvement. His experience would lead him to think that the fault, when no relief from deafness was obtained, was that the pledget of cotton was too small; his best results being when he used large pledgets that almost filled the external auditory meatus these being rolled so as to be long enough to fill about two-thirds the length of the external canal and thick enough to pass easily into the canal, the cotton having been moistened with a solution of boric acid. He cited one case that without this artificial aid could not hear a word of conversation at the closest range, but after such application of cotton could easily hear ordinary conversation several feet distant. He had tried numerous times to see if some benefit could not be derived from the smaller pledgets, but none smaller than the kind mentioned did any good whatever.

Dr. Patterson's experience led him to believe that the pledget of cotton did all that any form of drum could do. Since hearing a discussion of this subject a few years ago at a meeting of the American Hom. O., O. and L. Society he had tried this method on many of the cases presenting themselves, and had been agreeably surprised to find how many of them could be helped by this simple measure. He was satisfied that otologists, as a rule, were negligent along these lines and were too quick to give up if one or two trials did not give relief. His sucess with cases whose mtt. were not perforated had not been encouraging. In a few of these, however, much relief to tinnitus has been obtained; this proving more satisfactory than would have been marked improvement in hearing with no change in tinnitus.

Dr. Patterson's paper, of which the following is an extract, was a short review of the treatment of acute conjunctivitis: "In treatment of acute catarrhal conjunctivitis the use of the ice compress with the internal administration of aconite followed by euphrasia or pulsatilla will cure the simple cases in a few days. In all forms of conjunctivitis the above is the best plan of treatment to be carried out during the first few days, but in the more severe catarrhal, and in all forms of purulent conjunctivitis, something further must be done. Should the dis-

charge become profuse, of a mucous or muco-purulent character, then in addition to frequent washings of the eye with a 2 per cent. solution of boric acid or a 1 to 4000 solution of bichloride of mercury, application of a 2 per cent. solution of nitrate of silver must be made daily to the conjunctiva of both upper and lower lids, the excess being washed off with plain, sterile water.

"The indication for the local use of silver nitrate is the discharge, more or less profuse. of a mucous or muco-purulent character, the mucous membrane having a soft, soggy appearance.

"This paper was written to emphasize the necessity in purulent inflammation of not relying upon such remedies as argyrol and protargol. No matter in what solution they are used they do not take the place of the old reliable nitrate.

"The newer preparations, especially argyrol, have a useful place, however, in the treatment of catarrhal inflammations, and in purulent inflammations they may be given to patients for frequent home use between the treatments given by the oculist. In purulent inflammations of the conjunctiva all other astringents and fancy compounds are useless; as Dr. J. H. Thompson, of Kansas City, in his book upon conjunctivitis, says: 'The physician who sticks to the silver will save the most eyes.' My experience certainly makes me endorse Dr. Thompson's statement.

"In some of the more severe forms of catarrhal conjunctivitis no local treatment causes an abatement of symptoms until the chloride or sulphate of zinc, I grain to the ounce, is used.

"In quite a number of such cases my bacteriologist has been able to demonstrate the presence of Week's bacilli, and in practically every case of acute contagious conjunctivitis he has found the pneumococcus of Fraenkel.

"It might seem like a waste of words at this day to protest against the use of poultices in acute conjunctivitis. But only a short time ago a case was referred to me, that had been greatly aggravated by the use of some form of Denver mud. Evidently the good physician had often seen the beneficent effects of this kind of poultice in other diseases attended by pain and swelling, and thought it would be the proper thing for this cedema of lids and conjunctiva."

Discussion. Dr. John H. McCaughn, of St. Louis, said that in a large experience in maternity hospitals he had learned to rely upon the silver nitrate, as suggested by Crédé, to the exclusion of all the

newer silver preparations. Even after the use of this they still had to contend with quite a number of cases of ophthalmia neonatorum, although these cases were never as severe as when from neglect (a thing that he was sorry to say would happen occasionally in large public institutions) the silver was not used.

Dr. Campbell said that from some cause he did not seem to get the same good results in purulent inflammations from the use of argyrol as he did when he first began to employ the drug, although the solutions he now used were stronger than at that time. However, he still thought it a valuable aid in such cases, and he was satisfied that recovery was more rapid when it was used in connection with the silver nitrate than when the nitrate alone was used.

Dr. Seidlitz said the experience of the author and of Dr. Campbell in this class of cases was similar to his own experience.

## THE SEVENTH QUINQUENNIAL INTERNATIONAL HO-MŒOPATHIC CONGRESS.

#### PRELIMINARY ANNOUNCEMENT.

Ta joint meeting of the Executive Committee of the American Institute of Homocopathy and the Institute's Special Committee on the International Congress held in New York, January 31st and February 1st, it was voted to hold the Congress in Atlantic City. New Jersey, during the week of September, beginning on the 10th and ending on the 15th. The Institute will hold its business sessions daily and independently, but will merge its scientific sessions with those of the Congress. In accordance with this plan the Institute will hold its opening meeting on Monday afternoon, Septemoth, at two o'clock, when the preliminary business will be transfer of, the memorial exercises held and the usual reports received.

Thereafter the Institute will hold its business sessions from nine to ten o'clock daily until adjournment.

The Congress will be called to order for organization and preliminary work at four-thirty o'clock Monday afternoon, September 10th. On Monday evening the formal opening of the Congress will take place, when it is expected that various addresses of a semi-popular nature will be made, and to which the public will be invited. On the following

days of the week the Congress will have the hours from ten until one o'clock. The Congress will also hold afternoon and evening sessions during the week as required. It is expected that the affiliated and sectional societies will hold their sessions during the afternoons and evenings of the week, leaving the mornings entirely free for the Congress.

Friday evening has been set apart for social recreation, and for that evening the Congress, Institute and visitors will be the guests of the Local Committee of Arrangements.

The subjects to be discussed by the Congress have been classified under the bureau system of the Institute, and the following order was adopted: On Tuesday there will be discussed the Principles and Propagandism of Homœopathy. The subjects for Wednesday's sessions will be connected with Materia Medica, Drug Pathogenesy, Provings, etc. At the Thursday sessions will be considered Clinical Medicine and Pathology. At the Friday sessions will be considered subjects pertaining to Pædiatrics and Sanitary Science. Saturday will be utilized for adjourned meetings and concluding exercises.

At the meeting referred to, it was voted that essays on subjects connected with Surgery, Gynæcology, Obstetrics and other specialties be referred to the appropriate sectional societies. By such an arrangement, papers from our foreign colleagues can be assured of an appreciative reception.

All of the sectional societies have not yet been heard from, but we have been assured by some that the general plan above outlined is approved, and it is expected that all of the sectional societies will cooperate with the Institute and the Congress in making the forthcoming meeting at Atlantic City the most successful in the history of no-meeopathy.

We have been assured by the Local Committee of Arrangements that if notified in season they will have ample hotel accommodations for a large gathering. On account of the season of the year it will not be possible to arrange for hotel headquarters as is usually the custom. In all probability, however, the headquarters of the Congress, Institute and allied societies will be at the place where the meetings are to be held. The facilities for conventions offered by Atlantic City are unsurpassed, and there will be ample room for Institute, Congress and sectional societies and committees. There will be no crowding. This

world-famous watering place and health resort will be at its best, and the local committee will do their best for the entertainment of their Luests.

## Committee.

J. H. McClelland, M. D., Pittsburg, Pa., Chairman;

J. B. GREGG CUSTIS, M. D., Washington, D. C.;

H. F. BIGGAR, Cleveland, O.;

O. S. RUNNELS, M. D., Indianapolis, Ind.;

J. P. SUTHERLAND, M. D., 302 Beacon St., Boston, Sec'y.

#### THE AUTOCRATIC DOCTOR.

When you've swallowed Scott's Emulsion by the gallon or the jug, When you've finished iodinin' of your back,

Will you kindly drop your sputum in my little china mug And send it to a party at Nordrach?

He's an autocratic doctor with a rough and ready tongue,

But tubercular bacilli can't abide him,

And the patient finds him busy wiping something off his lung By cramming lots of little things inside him.

Raw meat, cooked meat, meat of a hundred kinds;

Fifty chronics at table, striving to eat their lunch.

Each of them doing his level best to swallow the skins and rinds. Pass your plate for your credit's sake, and munch, munch!

There are some who "pouch" in secret, asking no permission to, For they know they wouldn't get it if they did,

Scraps of cheese and bits of lobster. lumps of meat they couldn't chew,

And a rather more than gamey piece of kid;

And havin' been so casual, they feel sorry when they're gone

(For the Autocratic Doctor's sure to out 'em),

When their lungs are going dicky with the winter coming on They'll miss the bloke who understands about 'em.

Cooked food, raw food, plenty of milk, and rest,

Quarter o' pound of butter—Schwarzbrod by the hunch,

Each of 'ern trying to raise his weight and widen his girth and chest. Pass your plate for your credit's sake, and munch, munch!

-The Practitioner.

## PRACTICAL HINTS.

Conducted by G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

Gonorrhoeal Ophthalmia. A recent case of gonorrhoeal ophthalmia treated at the New York Ophthalmic Hospital had had till the fourth day of secretion no local treatment, but the indicated remedy had been carefully given internally. The result was unfavorable.

Fistula of the Cornea. Following a small perforating ulcer of the cornea in a case of purulent ophthalmia at the New York Ophthalmic Hospital, the iris lodged in the opening, so that, in healing, the aqueous constantly filtered through and the anterior chamber failed to reform. After the purulent secretion had ceased (the lower part of this cornea afforded the best vision) it became a question as to how best to close the opening. Stimulants were tried carefully, using first alum in stick form: later, the stick of copper sulphate. Neither of these seemed to be of help, nor did they cause much irritation. Following this, pure carbolic acid was carefully applied. First the cornea was anæsthetized with cocain, then dried and the acid touched to the point of strangulated iris. Here also the irritation was not marked, but enough resulted to bind more firmly the iris into the wound and presently the anterior chamber began to reform, a process that continued (a pressure bandage was also used) till it became permanent.

Persistent Odors in Bottles, such as iodoform, asafætida, ichthyol and valerian, should be treated by pouring fresh powdered mustard into the bottle, then cold water, shake, stand awhile, and rinse with fresh water.

The Fumes of Nitric Acid, Inhaled, may be fatal at the end of twenty-four hours, although no ill effects appear during the first three hours. The convulsions are reflex from irritation, by the nitrous vapor, of the motor nerve endings in the respiratory organs: the heart, lungs and diaphragm are convulsed. Chloroform prevents or diminishes this. In the event of anyone inhaling nitrous vapors he should swallow every ten minutes three to five drops of chloroform in a glass of water.

Watch the Vascular Tension of every patient with diabetic or albuminuric retinitis as of service in the prognosis. The higher the blood pressure the more apt are hæmorrhages to occur; with low tension the fundus is apt to show the inflammatory type. Active congestion is more apt to be found with high and passive congestion with low tension.

Alypin, the new local anæsthetic, readily penetrates mucous membranes. It is very serviceable for urological practice. In its effects it is at least equal to cocain and beta-eucain, with the great advantage of relative innocuousness, and it appears to be free from any deleterious by-effects.

The Question of Anaesthesia for Intratympanic Operations depends upon the amount of tissue to be removed and the fortitude of the patient. Local anæsthesia is sufficient for the removal of a freely exposed malleus or its remnants. or of exuberant granulations, or to snare a polypus; also to enlarge a perforation in the membrana tympani, or when a few easily accessible adhesions are to be destroyed.

General anæsthesia is absolutely necessary for ossiculectomy, with or without curettage of the tympanic walls; also when the patient is nervous or very restless; when the intratympanic operation is to be of any extent, or carious bone is to be removed.

Knives May Be Sterilized perfectly, says Oppenheimer, by exposure for a time to formaldehyde vapor. We have been in the habit of doing this for years, by placing them for an hour or two in the Schering formalin sterilizer and volatilizing in it paraform. Oppenheimer recommends washing out the external meatus with 1:5000 formalin in the preparation for the mastoid operation.

The Schwartze Operation is not confined, according to Oppenheimer, to acute mastoid abscess; it is applicable where the mastoid is not extensively involved; it is indicated when both subjective and objective symptoms limit the disease to the antrum and its immediate neighborhood toward the cortex, and when serious symptoms, such as facial paralysis, vertigo, intracrantial involvement or sinus changes, are absent. Cholesteatoma absolutely contra-indicates the simple operation in favor of the radical operation.

The Lateral Sinus Is Displaced Forward, says Amberg, because of assymmetry of the skull. This displacement is indicated by the following signs: (1) The eye is somewhat higher on the side on which the sinus is displaced. (2) The nasal septum is pushed toward the opposite side; there is a prominence on the opposite side; the tip of the nose is turned toward the side on which the sinus is forward, and the pyriform aperture is larger and stands somewhat higher on the same side. (3) The hard plate on the same side is higher and narrower. (4) The incisor is placed a little more toward the side on which the sinus is displaced forward. (5) The occipital and parietal bones are pressed inward on the same side and pushed outward on the opposite side. (6) The greater the extent of the planum mastoideum and the more perpendicular it stands on the outer meatus, the less strongly the sinus is developed. The planum forms an angle greater than a right angle with the meatus. In seventeen bones he found the thick-

ness of the wall of the sinus to vary from 2.5 to 10 millimeters, with an average thickness of 5.75 millimeters.

In the Child, When Performing the Mastoid Operation, the spine of Henle must be brought well into view and the external canal seen fading into the membrana tympani, else there will be probability of entering the middle cranial fossa instead of opening the mastoid in the direction of the antrum.

Nasal Injections of Paraffin are dangerous. Pulmonary embolism and even death by cerebral infarct have followed such attempt to build up the nose. Professor Rohmer, of Nancy (Ann. d'Ocul.). quotes numerous instances of sudden monocular blindness due to it.

The Most Difficult Problem in Chronic Suppurative Otitis Media is to know when to open the mastoid in the absence of well marked symptoms pointing to its involvement; each case must be individualized and decided by the particular condition present. The pathological findings do not always correspond to the clinical symptoms. After conservative treatment has failed to cure Politzer divides the indications for operation into subjective and objective.

The subjective are: Persistence of pain in the ear or over the mastoid process; permanent, or intermittent, attacks of vertigo due to erosion of the external semi-circular canal; marked cerebral disturbance.

The objective are: (1) Caries of the wall of the tympanum. Granulations and polypi in the neighborhood of the aditus, which soon recur after their removal. (3) Fistulous openings in the cortex. (5) Hyperostotic stricture of the external audi-(4) Cholesteatoma. (6) Facial paralysis or paresis. (7) Painful swelling of the mastoid. (8) Prolonged feetid suppuration resisting treatment, especially if the upper posterior portion of the membrana tympani is perforated and its remnants are adherent to the internal wall of the middle ear, and more so if pus and epithelial masses can be drawn from the region of the aditus by aspiration. (9) Symptoms of tuberculosis occurring in a case of chronic suppuration (aural suppuration in a case with pulmonary tuberculosis being a contra-indication for operation on the mastoid). (10) Evidences of intracranial or sinus involvement.

Congenital Paralysis, bilateral, of the external oculo-motor muscles, one case, and two cases of congenital blepharoptosis are reported by Dr. Giovanni Fabrizi in Annali dell' Istituto Psichiatrico di Roma, vol. iii, fas. 1, 1904.

The Thyroid Gland Is a Powerful Governing Factor in Sleep; its degeneration produces sleepiness: its hyperactivity sleeplessness. We can produce sleepiness with the serum of a thyroidectomized animal, and sleeplessness with thyroid extract.

## CORRESPONDENCE.

San Francisco, May 4, 1906.

Dr. A. B. Norton,

16 West 45th St., New York City.

Dear Sir:

I am just in receipt of your favor of April 24th. The mails are so badly congested that delay in transit is almost the rule, and it is difficult to depend upon the exact time of delivery, hence the delay in this case.

I beg to acknowledge thankfully on behalf of the profession any efforts that you have made or may make in regard to relieving the distress in San Francisco. I cannot picture the catastrophe worse than it really is. While the earthquake was very unusual, yet the destruction in that matter was infinitesimal in comparison with the ravages of fire, which took four square miles of the city. Every homoeopathist was burned out, but many of our homes were saved, being remote from the center of the city.

I shall be very glad, in keeping with your request, to undertake the distribution of funds that may be sent directed to the upbuilding of the medical men of our school. I shall do this with the utmost discrimination. and, finally, render an account to you of the expenditure of such funds.

Every one of us has lost all of his office equipment. This, together with the depopulation of the city for some months to come, has rendered helpless the fraternity from earning power. Supplies, both medical and otherwise, are coming rapidly into the city, so that with a little money most of the physicians can again be placed in a position to earn a livelihood. Any help that the physicians East may see fit to give will unquestionably do a vast amount towards prompt reconstruction of earning power.

I cannot tell you how feelingly we appreciate that so much consideration and thought has been given by those of you removed from the scene of this terror. There is plenty of spirit and energy left, and reconstruction on every side will proceed, but at this juncture a little ready money for the meeting of necessary office supplies is needed.

Our hospital suffered to the extent of about \$15,000—not in the main part of the building, but chiefly at the ends of the pavilions. It, however, can be repaired, and at once the establishment of permanent quarters can be arranged for reception of patients and operative work.

I have wired you to-day, accepting your request, and this letter gives more fully explanation as to the direction of the expenditure. Whatever there may be left over and above the necessary aid to physicians will doubtless be directed towards the reconstruction of the hospital, so that you may feel, and the profession who kindly assist in this fund, that every dollar will go towards the homoeopathic cause.

Very sincerely yours,

JAMES W. WARD,
President Health Commission.

2700 Broadway.

Oakland, Cal., May 4, 1906.

JOHN L. MOFFAT, M. D., Editor, 1136 Dean Street, Brooklyn, N. Y.

Dear Doctor:

Through the Associated Press an appeal is being sent all over the country from "The Meissen of California" for contributions to be used as a fund for the benefit of any destitute homoeopathic physicians of San Francisco.

As its president, I have been requested to write to the editors of every homoeopathic medical journal of the country asking them to make an immediate appeal through their journals for contributions to this most necessary and worthy fund.

"The Meissen of California" is an organization of the women in the families of the members of the California State Homeopathic Medical Society, and we feel it a duty to do all in our power to alleviate the loss and suffering of the members of our school and their families caused by the recent deplorable calamity in San Francisco.

Very sincerely yours,

ELEANOR F. MARTIN.

Kindly send all communications and contributions to

DR. ELEANOR F. MARTIN,

Delger Building, Broadway and 14th St., Oakland, Cal.

Union Springs Bank Building, Oakland, Cal.

Dear Dr. MOFFAT:

I thank you most sincerely for your kind and sympathetic letter of the 28th ult. My office and equipment were entirely destroyed, but fortunately my home, being in Oakland, was practically uninjured; the house lost its chimneys, and was cracked through the inside plastering here and there. In San Francisco the earthquake was most severe; the tall steel frame buildings withstood the quaking more thoroughly than any other form of structure, but the fire completed the destruction of the city, burning out over ten square miles, and rendering nearly 300,000 people homeless. Being wiped off the map at my age is a most serious matter, and with a wife and two children the blow was crushing.

Fortunately I have a good friend in active practice in Oakland and in my line, and for the present my address will be Union Savings Bank Building. Oakland, Cal.

\* \* Our physicians out here are much cheered and encouraged in the knowledge of the sympathy and aid extended from our Eastern brethren. Many of our younger practitioners are down to the clothes on their back, and standing in line to receive their daily necessities of life.

Happily the horrors of the time are abating, but there is yet a world of suffering.

Fraternally and cordially yours.

May 9, 1906.

H. C. PETERSON.

San Francisco, May 6. 1906.

JOHN L. MOFFAT, M. D., Brooklyn, N. Y.

Dear Doctor:

I thank you and all our Eastern brethren for the cordial and substantial sympathy manifested in these trying times. We deeply appreciate it, I can assure you. Though almost completely wiped out, yet what is left is full of the stern stuff that transformed these barren sand dunes into a metropolis in the days gone by.

Until we have something to move into I shall be across the bay, and my address will be No. 2428 Bancroft Way, Berkely. Hours as before. Again thanking you, I remain,

Sincerely and fraternally yours,

PHILIP RICE.

## BOOK REVIEWS.

THE SURGICAL TREATMENT OF CHRONIC SUPPURATION OF THE MIDDLE EAR AND MASTOID. By SEYMOUR OPPENHEIMER, M. D., Otologist and Laryngologist to Gouverneur Hospital, to Mt. Sinai Hospital Dispensary, etc. With 46 half-tone plates containing 64 figures, and 27 key plates, all engraved from original drawings prepared from special dissections under the supervision of the author. Octavo. Pp. 425. Cloth, \$6.00; half morocco, \$7.00, net. P. Blakiston's Son & Co.. Philadelphia, 1906.

A magnificent work, beautifully gotten up, that is practically a library upon this subject, because the opinions and procedures of virtually all the best authorities are freely quoted. "Probably the most difficult problem in chronic suppurative otitis media at the present time is to know when to open the mastoid in the absence of any well marked symptoms pointing to its involvement, and while general indications may be formulated, the question as regards the individual case must be solved by the particular conditions present in that case."

"Although the tympanic exenteration has been designated the radical operation, yet actually this is only relatively so, as it may be impossible to remove all the diseased tissue that may extend to the finer cellular spaces in all parts of the temporal bone, and while in the majority of cases sufficient of the diseased tissue may be removed to obtain a permanent cessation of the purulent discharge, yet in many instances failure must of necessity take place." "As regards the pathological changes in the temporal bone, the presence of caries—as shown by the recurrence of granulation tissue after its removal, fistula in the mastoid process, antral suppuration, paralysis of the facial nerve, acute mastoiditis during the course of the tympanic suppuration, and suppuration resisting other treatment—indicates the necessity for the removal of the diseased tissue in its entirety. Narrowing or actual stricture of the external canal leading to pus retention, or the presence of cholesteatoma of the antrum or mastoid undoubtedly indicates operation."

The illustrations are beautiful, as is the typography, and the Irish linen paper is luxurious. It is a pity that key plate XXI is so comically numbered.





## The Ibomæopathic

# Eye, Ear and Throat Journal.

Vol. XII.

Lancaster, Pa., and New York, July, 1906.

No. 7.

### EDITORIAL.

#### ADJUSTMENT OF GLASSES.

HE importance of the proper adjustment to the eyes and face of spectacles and eye-glasses is dwelt upon in books on this subject, and is conceded, in theory at least, by oculists and the best opticians; but as a matter of fact its practice is but too frequently honored in the breach rather than in the observance, even to-day.

How many oculists make a habit of testing the fit of the glasses furnished upon their prescriptions—especially as to the distance between the optical centers, and as to the proper tilting of reading glasses? Yet it is by carelessness on these points that the optician is apt to ruin the prescriber's reputation. Occasionally we find asthenopic symptoms due to improper centering of glasses, which, the patient assures us, have been accepted by the oculist as correctly made.

A patient once took a prescription by the writer to the wrong optician who—as was common with him—disregarded the written instructions and furnished glasses with too great distance between the optical centers. The patient further disregarded instructions and failed to report with the glasses; these gave so much discomfort that she went to another oculist who gave identically the same prescription and sent her to the original optician; this time she went where she was sent, and the glasses were made as ordered. The result was that the patient was convinced that the writer did not know his business.

Many opticians think they know it all, and will not believe that slight differences will cause marked trouble.

The eyes of another patient were so sensitive to disturbances of the distance between the optical centers as to feel discomfort if the distance were increased by forcing the eye-glasses further upon the nose; yet these glasses were but + 0.25 spherical.

We have all been taught that the plane of the correcting lens when in use should be as nearly as possible perpendicular to the line of vision. Looking obliquely through a spherical glass has an effect equivalent to the addition of a cylinder. In 1877 Dr. Edward Jackson called attention to this, and gave a table showing that the spherocylindrical equivalent of I diopeter lens tilted 45° from perpendicular to the visual axis is 1.22 sph. 1.24 cyl. At less degrees of obliquity the astigmia is less, but it is not uncommon to see reading glasses fitted vertically upon the face as if to be used only for extreme distance; the line of sight when reading through such a glass is at least 45° from the principle axis of the lens.

This malposition is fostered by the direction given the patient by the optician to "press the spring (of the eye-glasses) back to touch the brow"—the spring almost invariably being in, or in front of, the plane of the lens.

Even the best opticians are commonly at fault in this respect. One way to rectify it is to reverse the spring which is bent forward at its top in order to accommodate projecting brows. But more important is it for the manufacturers of clips to furnish some with the lens clamp and wings set at varying angles to the plane of the nose piece, so that the glasses will be tilted for reading while the nose piece rests upon the nose in the same position as that of the distant vision glasses.

Spectacles do come tilted for near vision, but eye-glasses can now be made to fit the nose so much more exactly that they are superceding spectacles to an increasing extent. Neglect to adjust the temples to ears of unequal height leads to a drooping of the spectacles and trouble-some hyperphoria.

## THE PROBLEM OF EYE STRAIN.\*

DAVID W. WELLS, M. D.,

## Boston, Mass.

F the many questions which are of interest both to the general practitioner and the ophthalmologist there are two which are of such vital importance to ourselves and our patients that, even though they may sound trite, I beg your indulgence for their further consideration.

- I. In what class of cases is it reasonable to suspect eye strain may be a factor?
- 2. What complications may be encountered in treating a given case? The extensive, somewhat popular, writings of the author of Biographic Clinics has opened anew this whole subject of ocular reflexes. The tendency to claim everything may, it is feared, lead thoughtful men to wonder if there are any definitely demonstrated eye strain reflexes.

Ill health is seldom the result of one specific cause. With such a complex organism as the human body, whose myriad functions are under the control of nerve centers, not working independently, but all correlated through the sympathetic nervous system, it is certainly presumable that a special symptom complex is produced by the ensemble of the deleterious influences.

The well recognized individual variations of susceptibility and power of resistance make it evident that, in the realm of etiology, the temperament must not be ignored. We must never forget that we are treating not the disease but the patient.

In no department of medicine is the lack of a scientific mental habit more flagrantly apparent than in therapeutics. We are all prone to attribute all that follows in a given case, at least all the good, to the particular means employed. Conclusions drawn from insufficient data

<sup>\*</sup>Read by invitation before the New York County Homœopathic Medical Society.

are apt to be erroneous. Ophthalmologists are not the only sinners, I indict the whole profession.

"When doctors disagree who shall decide," is so much of a truism that it reflects seriously on the medical profession. May this not be a legitimate corollary of the popular fallacy that "every man has a right to his opinion."

In contradiction I should like to submit that no man has a right to an opinion on any subject which he has not investigated by scientific methods. By science is meant "the knowledge of many, methodically digested and arranged so as to become obtainable by one." To this end statistics of a large number of competent observers are essential.

A commendable effort along this line has recently been made by Dr. Lucien Howe, of Buffalo, to determine "What are the so-called reflexes which can properly be referred to eye strain?"\* Letters were sent to 208 ophthalmologists, of whom the following questions were asked:

- "I. How many, or about how many, cases of diseases of the eye have you recorded as seen in private and in hospital or dispensary practice altogether?
- "2. Among them all how many have you recorded in which eye strain can justly be considered in any way a cause of any one of the following diseases or conditions: Keratitis, iritis, glaucoma, choroidal diseases, hyperæmia of the retina, diseases of the macula in any form, pigmented retinitis, other retinal diseases, sinus diseases, pharyngitis, laryngitis, aphonia, common colds, influenza, pneumonia, tuberculosis, anorexia, denutrition, intestinal fermentation, constipation, disorder of the liver, dyspepsia, loss of appetite, nephritis, cardiac palpitation, chorea, epilepsy, insomnia, scoliosis?"†

To these only twenty-four replies were sufficiently explicit in numbers to use statistically, but these replies were based on a study of 350,000 cases. "Twenty of these twenty-four observers reported that they had not seen a single case in which the diseased conditions or reflexes mentioned in the circular letter were apparently due to eye strain. Four of these observers, however, reported that the following were apparently the result of eye strain, namely: Choroidal disease, three; diseases of the macula, one; hysterical laryngitis, one; chorea, one; epilepsy, five; insomnia, twelve. That is to say these are all of

<sup>\*</sup>Ophthalmology, January, '06.

<sup>†</sup>These diseases are selected from the articles on the New Ophthalmology.

the diseases or reflexes which were found by these men among 350,000 cases of refraction or muscular anomalies."

Dr. Howe concludes: "In view of these facts, if we ask, finally, What are the symptoms which can be referred to eye strain? we can safely include in that list those in the three groups first mentioned, namely, symptoms referred to the eyes, to the head in general or the stomach, and on this point we are all of the same opinion. Other morbid conditions may be dependent on eye strain, but proof of that is what we need, and not simply the affirmative evidence, but the control observations."

From these facts Dr. Howe's inclusion of symptoms referred to the stomach is absolutely unwarranted. He has not drawn a logical conclusion, but has simply re-affirmed an opinion in which he says nearly every ophthalmologist agrees.

To me it is evident that the insinuation, in the letter accompanying these questions, that the author of the New Ophthalmology has made extravagant claims that these diseases above enumerated were caused by eye strain produced ultra conservative answers.

When I read that sixty of these observers have seen no case of dyspepsia caused by eye strain, I am conscious of an impulse to question the result of the investigation even while I maintain the correctness of the principles. I feel certain that I have seen a great many cases of nervous indigestion cured by relieving the eye strain.

Dr. Myles Standish says:\* "It has often been my lot to be told by patients that after the correction of an error of the refraction, unexpectedly to them, their dyspeptic symptoms had disappeared."

Nevertheless, if we confine ourselves to symptoms referred to the eyes, to the head in general, or the stomach, we shall find a goodly number among the chronics. Passing over the cases having pain in the eyes, which is primary and not reflex, we come to the question of headache.

On careful inquiry it may be found that the headache is not an ache at all, but a confused feeling, inability to concentrate the attention, or vertigo—all included under "symptoms referred to the head in general."

Various attempts have been made to define a typical eye strain headache: first, as to location, that it must be frontal, temporal or occipital,

<sup>\*</sup>Boston Med. and Surgical Journal, February 23, '05.

not vertical; second, that it must follow use of the eyes or close application.

For some years the writer has been insisting on the futility of such diagnosis. In the N. E. Medical Gazette, February, '01, the matter was summed up by the writer as follows: "The eye headache is usually a dull pain, generally referred to forehead, temple or occiput. but any attempt to differentiate headaches and to decide by the location and character of the pain whether it be a reflex from eye strain or not, would seem to be thoroughly impracticable. Every case of chronic headache, whether temporal, vertical, frontal or occipital, merits ocular investigation."

There is another very common misconception which must be corrected, to wit, that good sight excludes eye strain. The fact is quite the reverse. It is the error which the patient strains to correct, thereby securing good vision but with great waste of nervous energy, which causes the reflex symptoms. If the defect be so great that he cannot overcome it, he gives it up and escapes the strain. This matter was treated in detail by the writer in *Medical Gazette* just quoted, the article being entitled "Eye Strain Notwithstanding Acute Vision."

Dr. Howard F. Hansell, of Philadelphia,† says: "We read that 80 per cent. of all headaches are ocular. This means presumably that 80 per cent. of the cases of headache applying at the oculist's office are relieved by ocular treatment, and 20 per cent. are not benefited. Of the other cases of headache, those that do not seek ocular treatment, no account is taken."

Before a scientific answer is made, the general practitioners must give us their statistics on the following questions: What proportion of headaches is cured by dietetics, by medicines? What proportion is referred to the different specialists, rhinologist, gynæcologist and oculist? What are the results of these different lines of treatment? Here is a service which the general practitioner can render to medical science. If such results have been published, it has not been my good fortune to see them. In behalf of the specialists, in behalf of suffering humanity, let me earnestly implore you to tabulate your cases in some such way as above suggested, and to publish your conclusions.

Sick headaches, the bete noir of medicine, is a subject about which medical men are greatly at variance. Many neurologists maintain that it is a pyschosis closely akin to epilepsy, depending largely on heredity.

<sup>\*</sup>Ophthalmology, January, '06.

To some of us this appears like begging the question. Dr. Myles Standish answers this in true Yankee fashion by asking, "Are not eyes hereditary?"

Dr. John H. Payne, in a paper read before the Boston Homocopathic Medical Society, January, '06, says: "Personally I do not as yet believe that true migraine is produced by eye defect or can be permanently cured by correction of refractive and muscular errors, though, as I have said, the attacks are undoubtedly in many cases modified very materially by eye treatment. The great difficulty has been in the correct diagnosis of true migraine from hysterical hemicrania, and thus confusion in recorded cases of cure. True migraine seems more the nature of a partial sensorial epilepsy with a distinct aura, motor, sensory, vasomotor or psychic." He sums up: "In view of all these facts it seems to me that the logical course to pursue in treatment of this malady is to have first of all the refractive and muscular abnormalities of the eye carefully investigated and corrected before beginning on any other systemic treatment, as these, if present, will of a certainty precipitate and increase the attacks, even if they are fundamentally dependent on other causes."

Dr. Gould says\* that the symptoms are so various that there is no such thing as a "typical" case of migraine. With characteristic enthusiasm he claims that 99 per cent. are caused by eye strain.

All are agreed that the symptoms are referred to the eyes, the head in general, and the stomach. This is at least presumptive evidence of eye strain as a cause.

Dr. G. L. Walton,† a noted neurologist of Boston, after reviewing some of the current theories—psychic excitation, sensorial or visual, emotion, exogenous intoxication, gastric disturbance and constipation—says: "I have no special quarrel with this line of reasoning, but would suggest that refractive error be given a prominent place, in fact, the prominent place, among the exciting causes, and that a due amount of effort be made in each case to remove this exciting cause. To neglect this effort is to ignore without investigation a mass of evidence collected by competent observers."

These are the words not of an enthusiastic ophthalmologist but of a conservative neurologist.

<sup>\*</sup>Journal A. M. A., October 28, '05.

<sup>†</sup>Boston Med. and Surg. Journal. June 22, '05.

Dr. Walton conceived the unique idea of questioning the blind as to the frequency of headache. Ninety of them had been blind since infancy, and of these 59 or 66 per cent. promptly stated that they had never had headaches, in marked contrast with the 31 per cent. of individuals with sight." This 31 per cent. of freedom from headache was the result of questioning 100 healthy individuals, sixty-eight of whom were members of Boston Normal School of Gymnastics. One of his conclusions is "that half the headaches in health are due to eye strain."

He cites a number of cases where glasses had been tried without relief, which were subsequently cured by more attention to the details of the refractive correction. This thought leads us naturally to the second consideration, viz.:

What complications may be encountered in treating a given case?

When a patient comes to us with a statement that one or more oculists of recognized ability have failed to give relief, it frequently develops that the specialist's effort was limited to one visit.

The answer. "It is evident then that your case requires careful study," often reveals a total lack of appreciation of the problem which we are called upon to solve. This feeling is, no doubt, a relic of prehistoric times, when a person, with more or less help from the optician, selected the glasses with which he could see the best. Certain experiences have led to the conclusion that this feeling is not confined to the laity. It is admitted that we oculists, like you general practitioners, sometimes make a lucky hit, but any general success is obtained only by the most painstaking study, and concerning the number of visits required, each case will be a law unto itself.

It may elucidate this matter somewhat briefly to review some of the difficulties to be overcome.

First, then, each eye must be considered separately as an optical instrument, very wonderful as a result of the organic evolution of a pigment spot, very crude from the standpoint of physics.

It is evident that living tissue, subject to constant metabolism, is a very unstable substance out of which to construct accurate refracting surfaces. Not only do we have errors in length of the optic axis—far and near sight—but the cornea is seldom if ever perfectly spherical, sectors in different planes having different curvatures—this constitutes astigmia.

To complicate matters still more the optic axis does not co-incide with the visual axis, that is, the patient does not use the center of the

cornea. Great care has to be exercised to be certain that we are measuring that portion of the cornea which the patient uses. The crystalline lens, by changes in whose thickness focusing for far and near is obtained, is not symmetrical, and its shape during accommodation often bears no direct relation to its shape at rest; this is called facultative astigmia. Thus it happens that astigmia during cyclopegia, when the ciliary muscle is paralyzed, differs from that exhibited when the normal muscle tone returns. Here fine distinction must be made between spasm and normal tonicity.

When each eye is correctly fitted, there arises the question, How do these exes work together? Binocular vision demands perfect co-ordination of the lines of sight in all positions, so that both eyes shall fix the same spot. Any tendency of either eye to deviate up, down, in or out often produces severe reflex symptoms even though each eye alone may be perfect. And there are many cases of latent deviation, which are made manifest only after considerable research. A perfect balance for all clistances seldom if ever exists.

Therefore, in every case we are obliged to decide if the imbalance be sufficient to annoy. Here, as in refractive errors, idiosyncracy overndes all rules. It is the patient we are treating not the optical condition. With one a clinical picture of severe eye strain may result from an error of half a degree, while ten times this amount will cause no discomfort in another. Granted that the muscle error is responsible for symptoms, shall it be corrected by tenotomy, by prisms, or by training?

Unless it be excessive, conservative men rarely operate until other means have been tried. The wearing of prisms, so placed as to relieve the wrong tendency, frequently affords satisfactory relief.

It often happens, however, that prisms fail to relieve. Muscle training—the so-called gymnastics—may cure the trouble entirely. To some of us it seems better practice first to attempt to cure before consigning the patient to the prism crutch.

Und enlying the co-ordinated movements of the eyes is a fusion faculty, that is a desire to use the two eyes together. This is not a congenital attribute, and according to Mr. Worth and his following, does not become ell established 'till the fifth or sixth year. Many adults have either over acquired enough of this to serve as a controlling power eyes together, have acquired a tendency to suppress it.

is frequently shown in a habit of closing one eve by which

relief from the effort of using the eyes together is obtained. I have noted of myself that if I find that I am getting drowsy while reading, I can keep awake much longer by closing one eye.

Any marked defect here may be the underlying cause of a true deviation or a tendency to deviate. Before one can reach an intelligent opinion of a muscle case, this whole matter of how the brain is utilizing the retinal images must be gone into, because the cultivation of a rudimentary fusion faculty may cure the inco-ordination.

Many of us have discontinued the practice of giving patients loose prisms to use at home for muscle training and, instead, compel them to come to the office, so that we may watch the movements of the eye during the exercise, because we have frequently discovered that a patient instead of fusing his double images, saw a single image by suppressing one eye. This may happen when using strong prisms, although the binocular sense is fairly good with weaker ones. This bad habit is easily acquired. My own method is first to cultivate a refinement of the fusion faculty. This is accomplished by means of the stereoscope with specially devised charts. This instrument is used at home twice a day for fifteen or twenty minutes. If there is a persistent suppression of the same eye, the use of a cyclopegic in the favorite eye will force the use of the other. It is seldom necessary to continue this more than a few days.

Some years ago Javal advocated the principle of "controlled reading." This is accomplished by holding a pencil midway betwen the eyes and the printed page. Unless both eyes are used the pencil covers some of the letters. In order that the patient may have both hands free I have him wear a head band to which is fastened a strip of blackened aluminum, which can be easily adjusted as an obstruction. This is used for all near work like reading, writing and sewing, and is continued for several months until the binocular habit becomes fixed. The relief obtained is so evident to the patient that he is perfectly willing to continue it as long as requested. Indeed, some are quite loath to give it up.

With a good fusion faculty established, the muscle development is rapid, and the result is usually permanent. This is because we have taught the patient to overcome his trouble himself. It is true that in some cases we fail. Here we have recourse to prisms. Not infrequently it is best to use prisms at first rather than attempt exercise. This applies especially to neurasthenics, in whom the muscular in-

sufficiency is a result and not a cause, also in cases of vertical deviations which are seldom cured by exercises.

It is also equally true that many cases which have both refractive and muscular errors can be relieved of all asthenopic symptoms by correcting the muscular error and ignoring the refractive defect. This obviates the necessity of consigning the patient to glasses, an omission which is immensely satisfactory to him. At the 1902 meeting of our Am. Hom. O., O. and L. Society, I reported a number of such cases, and still continue the practice.

There is still another very important consideration, the relation between the accommodation of each eve for different distances and the convergence or turning to the same point. This is normally the very refinement of co-ordinated impulses. The vertigo which results when the child attempts to read with grandmother's glasses, is because this normal relation is disturbed. Each ciliary muscle is relieved of the necessity of focusing, but the internal recti are required to do the same amount of work as without the glasses. I believe I am indebted to Dr. Norton for the elucidation of a principle along this line which is of the greatest practical importance. Given a case of far sight in which convex lenses are required, the strength of lenses needed to give greatest comfort depends on the power of the converging muscle. If weak, full correction of the far sight is not good practice, as the lessened nerve impulse to the ciliary furnishes lessened impulse to the internal recti, increasing the convergence insufficiency. If the eyes tend to turn in, that is excessive convergence, full strength convex lenses, even to the extent of blurring distant vision, will often relieve the asthenopia.

If this lengthy dissertation on some of the questions which are involved in the prescription of glasses has taxed your patience, you may be willing to believe that many of your eye strain patients tax ours.

When you refer a patient to your oculist to determine if symptoms referred to eyes, head in general, or stomach are caused by eye strain, you should prepare your patient to give the consultant at much time and as many visits as he may think necessary. Let me urge a more hearty co-operation with his efforts. Your knowledge of the patient, his idiosyncrasies and temperament will be of the greatest service. Your treatment of other possible sources of irritation, dietetically or medicinally is essential.

Don't send him to another oculist until your first choice has been given a free hand.

The Westminster, Copley Square.

phoria.

### DISCUSSION.

CHAS. DEADY: Years ago I cured a reflex case by prescribing -0.125 D. spherical, after paralyzing the accommodation with atropin. In another the cycloplegic changed the axis 10°, but remained a plus quarter diopter. My experience agrees with that of Dr. Wells, the smaller the error the greater the distress. Twenty-five years ago at the ophthalmic hospital we rarely tested for astigmia, now we find astigmia under thorough examination in about 95 per cent., except presbyopia, of all asthenopic cases that have any refractive error. I have cured what were supposed to be sick headaches and much dysmenorrhoea by attention to the eyes, and recollect an old lady who had been told that she had cancer of the stomach, but who was coursed by rectifying her astigmia and muscular imbalance. One patient had toothache whenever she played the piano. Her oculist finally discovered that she used only one eye at a time for near objects, and had binocular vision at a distance; the music on the piano was so far away that the eyes attempted binocular vision, but the effort to fuse the images brought on asthenopia, which manifested itself as toothache. Dr. Wells is right, that one examination is not sufficient. We must go to the bottom of the case and administer an efficient cycloplegic, else the patient might as well consult the refracting shop keeper. I find that most patients accept this when it is explained to them. My cycloplegic was atropin, but now is scopolamin. I:200; I have proven that the latter is equally or more efficient, and that its effects pass off the more quickly. It is a mistake to suppose that a cycloplegic should not be used after the age of 45. I relieved a feeble old woman, with whom four oculists had failed, by paralyzing her accommodation. She was myopic, and the concave glass prescribed was successful. She was so old and feeble that I did not dare administer the cycloplegic except in hospital.

E. G. TUTTLE: I am unable to state what proportion of headaches gynæcological work has cured in my practice. My records show all sorts of headaches: I make three classes of the functional ones. (1) Those due to plethora, including menstruation—these are relieved promptly by such remedies as belladonna, gelsemium, glonoin, etc.—or if due to scanty or decreased menstrual flow they respond to such drugs as cimicifuga, sanguinaria, sepia. (2) Headaches due to ovarian irritation are often over or in the eye, and are cured by apis, or the serpent poisons, as lachesis and naja. (3) Those due to uterine dis-

Prisms are only crutches, and I very rarely prescribe them in a glass; training the muscles is better practice, but the patient must not be allowed to do prism exercise at home, one image is too apt to be disregarded. Wearing, in many cases, proper glasses will cure a small degree of muscular weakness in a few weeks; it is my practice to try this before beginning training cases of one or two degrees of hetero-

placements. Here we meet the oculist on a basis similar to his mechanical correction of muscular and refractive problems. I agree with Dr. Wells that the only way to arrive at a scientific conclusion is to compare the reports of many men of different points of view. This leads us back to the general practitioner who does, or should, take all these into consideration and look the patient over from head to heels; his conclusions are, may be, less apt to be prejudiced or overdrawn than those of the specialist.

B. G. CLARK: It would seem that remedies should be of some use in these conditions of eye strain. A man came to me with "bilious headache;" had told another de on the was his trouble, and was salivated in consequence; glasse Oured many, have an occipital headache if my shoes are tight at middle and the andles. As to prisms, I believe that they, like crutches, decometimes serve a partiose for a while. The following indications may leading the and of the curative remedy:

Aconite—From exposue to cold or cold wind

Arnica—From injur

Argentum nitricum—Southen Argentum

Cactus—Comes on periodical

Carbo vegetabilis-From slight strain or sickness, < by looking upward. If associated with albuminuria.

Causticum—From dry cold; paralysis of recti muscles.

Chamomilla—If caused by anger (Coloc.).

China—From long illness.

Chelidonium—With hepatitis or scotoma.

Conium—With ptosis. (See caust., nat. a., nat. c., naja.)

Crocus—From weeping.

Cuprum—Associated with nausea.

Gelsemium—If caused by fright; with double vision.

Hamamelis—Chronic effects of injury (conium).

Hydrastis—With catarrhal troubles of nose and throat.

Kali iodatum—From syphilis.

Macrotinum—Before menses, > after them.

Natrum muriaticum With spinal irritation.

Nux vomica—From alcohol and tobacco.

Paris—With jerking pains; eyes feel drawn back by a thread.

Physostigma—Internal recti.

Rhus toxicodendron—From exposure to wet.

Ruta—From overuse at fine work.

Santonin—Associated with cystitis. Colored vision, objects look green, white looks yellow.

Secale—Double vision in weak subjects.

Senega—Double vision vertically; pupils dilated.

Spigelia—Associated with post-nasal catarrh. Severe pressing pains in eves.

Stillinga—From syphilis. Muscular soreness and pains, < by near work.

Tabacum—Internal recti. < by looking at anything white. Tilia—With facial neuralgia or rheumatism, < while sweating. Mrs. L., age 30, under a physician's care for headaches for four years, during which time she had been referred to an oculist for examination, and he had prescribed glasses without much relief. Headache were severe at times, but some pain nearly all the time; worse from reading or sewing and during menses, which were always accompanied with severe uterine pains. I carefully examined the eyes and was obliged to change her glasses, with some relief. Later, I dilated and curetted the uterus, which relieved the uterine pains during menstruation; then I gave her a 1° prism, base out, to help her fusion faculty; this she continues to wear. She felt she was nearly well; never had a severe headache any more, but some slight headaches after reading or sewing, mostly in the occipital region. Among the more prominent symptoms was an aversion to heavy clothing and a frequent desire to throw off the most of her coverings at night. I now gave her secale 1,000, three powders, one to take each night; she reported in ten days, saying, she had no more headaches after the second powder. Two months have now passed without any return of the

headache.

DR. Wells: I would emphasize the importance of correcting the slight errors—muscular as well as refractive—and that the oculist should be afforded all the time he wants to carry the case to a conclusion.

The Tongue. Triangular red tip, Rhus toxicodendron. Red streak down centre of yellow tongue, Veratrum viride. Thick. milky, white coating, Antimonium crudum. White streak on both sides, Causticum. Mapped tongue, Lachesis, Natrum muriaticum, Taraxacum. Dry. white, without thirst, Nux moschata. Trembling, catching on the teeth when protruded, Lachesis.

Dr. Loeser, of Berlin, reported two cases of paresis of external orbital muscles (abducens and sup. oblique), one at a time, after spinal anæsthesia, one following the use of ovocain (a new substitute for cocain), and another after the employment of stovain. The pareses were noticed five and eight days after the patients (vigorous men. 35 and 45 years old) had been operated on, and disappeared after a week or two. Dr. Schoeler had also witnessed one case after stovain. Dr. Loeser considers it a toxic paresis and believes that in future such paresis will not be rare. Dr. Levisohn considers the toxic paresis a basal one. A hæmorrhage or thrombosis may have been the cause of the paresis.

# A CASE OF LATENT HYPERPHORIA.\*

GEORGE A. SHEPARD, M. D.,

New York.

HILE trying to avoid a technical discussion of this subject, it is the desire of the writer to call attention to the fact that faults of balance in the extrinsic muscles of the eye are often hidden from the casual observer as is tonic spasm of the ciliary muscle. For many years the large majority of oculists have realized that without a cycloplegic the ciliary muscle can not be counted upon to be in a state of perfect relaxation. An oculist of world-wide reputation, an enthusiast in the correction of the refraction by the direct method, stated that he did not believe a man could absolutely relax his accommodation before he was seventy years old. General practitioners and patients have learned to accept the advice of the oculist that a cycloplegic test is very often necessary before a positive diagnosis can be given. Unfortunately the difficulty of determining the full degree of muscular imbalance and the necessity of repeated careful tests has not been fully appreciated in the past.

Although the first man may have been originally perfect, he has not come down through the ages without acquiring many structural faults—one foot is larger than the other; one shoulder higher than the other; the ears are not symmetrically placed upon the head; the pupillary distances are not equal, etc.

In health we have given to us a large surplus of nervous energy with which to run our defective physical organism, for the same reason that the proper installation of a power plant calls for a boiler capacity largely in excess of the required engine power.

If the normal eyeballs are correctly placed in normal orbits and the muscles are properly innervated, the visual lines of the two eyes will always point at the same objects, and two identical images will be formed in the optical area of the occipital lobe. If, because of mis-

<sup>\*</sup>Written expressly for this JOURNAL,

placed or improperly innervated muscles, these images do not coincide, double vision exists. The ocular centers abhor diplopia as does nature a vacuum. So the general fund of nerve force is called upon to fuse the images, thus causing nerve waste. The fusion faculty is more strongly marked in some individuals than in others, and one person may have perfect fusion with the same degree of muscular weakness, which in another will cause constant diplopia or suppression of the image. Suppression of the image of one eye is due to the fact that one cortical center becomes obtunded in the interest of single vision just as our auditory centers ignore many familiar sounds in the interest of a quiet life. If no effort is made at fusion when there is not perfect muscular balance, a squint exists, yet there is no resultant loss of nerve force; but when the fusion effort is strong a constant demand is made upon the central nerve supply, and unless there is a large surplus symptoms of nerve drain present themselves. While the correction of a far-sightedness by action of the ciliary muscle can be accomplished easily through childhood, the hardening of the lens makes it more difficult in adult life, and the habit is gradually broken, and the patient either accepts poorer vision as a necessary evil, or he wears a correcting lens. With a muscular defect the situation is different because the habit of single vision becomes more firmly fixed as years advance, and the only relief from effort while the eyes are open is by the suppression of the image of one eye, which allows that eve to take its position of rest. In the writer's experience very few cases show, at the first examination, all existing muscular defect. This is especially marked in hyperphoria. In order to obtain the full degree it is necessary to either correct with prisms the manifest error and allow them to be worn for several days, or, in exophoria, to overcome the irritability of the convergent center by exercise with prisms and the administration of the indicated remedy.

The following case illustrates with how much tenacity some patients will hide a muscular fault, even while the nutritive venous system shows serious disturbance:

Rev. J. B., aged 30 years, presented himself December 29, 1903, giving the following history: All his life he has had a strained feeling in eyes and frequent headaches, although of robust build and exceptional health. For two years he has worn with much relief O. D. + .75 ax. 95 years

One year ago while in Utah he had an inflammation of the right eye, which, he was told, was hæmorrhagic retinitis; on this account he left that high altitude. A few days ago vision began to decrease and the eyes became painful. Test of the vision showed O. D. 20/40, O. S. 20/200, with no improvement. Ophthalmoscopic examination revealed marked congestion of the fundus, discs hazy and veins tortuous. Immediate improvement began under the administration of duboisia and merc. sol.

January 19th. '04, vision, O. D. 15/15; O. S. 16/80.

February 9th, muscle test = Es. 6°. Ex. in acc. 1° R. h. 2½.

February 16th, B. O. D. + .75 ax.  $95^{\circ}$   $| - \frac{1}{2}^{\circ}$  p. b. d.; O. S. + .75 ax.  $90^{\circ}$  | - .25 ax.  $180 \bigcirc 2^{\circ}$  p. b. up.

This glass was worn with comfort, and on March 23d vis. O. U.

15/12. R. h. 3½°.

June 1st, complains of slight blurring of left vision, but vision for types 15/12.

July 2d, a small area of exudate appeared in the choroid about 6

mm. above macula.

November 29th, vis. O. D.  $^{15}/_{12}$ , O. S.  $^{15}/_{15}$  s. d. R. h. 4°.

December 14th, a small hæmorrhage, deep in retina, below macula, and in the following month several others appeared in this region. Also numerous whitish spots between the disc and the first spot of exudate, which had increased in size since first observed. On January 20th, the vis. O. S. 15/100.

During the winter Dr. Wm. H. Van den Burg had made an exhaustive physical examination, and had reported absolutely no defect. Two well known oculists to whom he was sent, with a full history, could give no light as to the cause of the disease. Gradual improvement took place until in June 26th, vis. O. S. 15/20 s. d.

July 1st, two days ago began to have double vision, which was cor-

rected by 5° prism, base down, before right eye.
July 13th, test showed R. h. 6½°.

July 13th, test showed R. h.  $6\frac{1}{2}$ °. July 15th, R. h.  $10\frac{1}{2}$ °. R. R. h. 7°.

July 20th, R. h. 11°, and again the prism correction was increased to 11°. This glass was worn with great comfort until September 15th, when the test showed R. h. 15°.

September 22d, tenotomy of left inferior rectus was performed; R. h.

reduced to 5°.

October 20th, R. h.  $6\frac{1}{2}$ °. A tenotomy of right superior rectus reduced R. h. to  $1\frac{1}{2}$ , but the major part of this result was lost by contraction.

March 1st. tenotomy of right superior rectus reduced R. h. to 1°,

which has remained constant to date, May 15th.

The eyes have felt perfectly well since the first full prismatic correction, and vision O. D. <sup>15</sup>/<sub>12</sub>, O. S. <sup>15</sup>/<sub>15</sub> s. d. The hæmorrhages have fully absorbed, only leaving a slight deformity of the retina in the

macular region. The choroidal deposits have decidedly diminished. This case has been especially favorable for observation, as it has been seen over eighty times in the last two years. Although it is, of course, usually impossible to see our patients frequently simply for our own satisfaction, yet we do not fully discharge our duty if we fail to take proper measures to detect latent muscular errors.

Diseases of the fundus may be due to uncorrected refractive and muscular errors.

859 Seventh Avenue.

Bactericidal Action of Glycerine. In the course of J. J. Kinyoun's investigations into the purifying influence of glycerine in glycerinated vaccine virus, he was led to observe that many bacteria are destroyed much more rapidly in vaccine emulsions containing glycerine alone than in cultures to which glycerine was added. In the course of his researches he found that when normal serum and glycerine were permitted to act together, their bactericidal power was much more effective than when either fluid was allowed to act alone; immune serums were less effective in this respect than normal serum, or, at least, with the latter the reduction in the number of organisms proceeded with considerably greater celerity. In one of his experiments he investigated a pneumonic exudate containing innumerable bacteria in every loopful. This exudate, when mixed with glycerine, suffered progressive diminution of bacteria, but all growth was not eliminated until after thirty-two hours. The addition of normal serum, however, to the mixture of glycerine and exudate brought about sterility in the short space of five hours. It was further found that the bactericidal action of various immune and normal serums was increased by the addition of glycerine, and that the most favorable proportion of this substance to add was 25 per cent. The most striking results were obtained when the gylcerine was mixed with the immune or normal serum before being added to the material containing the bacteria. J. of Exp. Med.

In cases of head traumata, bleeding from the mouth or nose does not necessarily mean that the case is one of fracture at the base. The hæmorrhage may be entirely due to a localized injury.—American Journal of Surgery.

In light narcosis the pupils may dilate reflexly from operative manipulations. This, of course, is not to be confused with the sudden extreme dilatation that occurs when the narcosis has been carried too far.

—American Journal of Surgery.

# BLEPHAROSPASM.\*

G. N. SEIDLITZ, A. M., M. D.,

St. Louis, Mo.

IKE all convulsive movements, blepharospasm varies in kind, energy, duration, etiology and consequences. It is symptomatic, reflex and essential, and of respective frequency as named.

We all, of course, know that the orbicularis palpebrarum is the muscle primarily involved; the spasmodic contractions often extend to contiguous muscles; in some instances, even to remote regions.

The spasms are tonic or clonic, the latter preponderating. The simplest form of blepharospasm is doubtless that caused by an attempt to inspect the eye. There need be no inflammation or special sensitiveness in such cases. The mere effort to separate the lids will give rise to annoying tonic spasm, the eyeball at the same time rolling upward. This kind of blepharospasm is, of course, emotional. When not continuitival sac will soon accomplish the desired end. Foreign bodies lodged in the sulcus subtarsalis, or on the cornea, cause a spasm of either kind, which disappears at once on their removal, if not too long deferred. Fibrillary twitchings frequently observed in either eyelid are due to eye strain, abuse of eyes, dissipation, loss of sleep, etc. Often alarming to the patient, who assures you something is wrong with the "nerve of the eye," it is really of little significance. The treatment is obvious.

Blepharospasm appears as a noticeable symptom of several external eye diseases, viz. blepharitis, trichiasis, phlyctenular conjunctivitis and keratitis. Of these the most marked and distressing blepharospasm accompanies phlyctenulæ. It is not always in proportion to the severity of the causal disease. Fissure of the external canthus is apt to result from the violent squeezing together of the lids and accompanying acrid

<sup>\*</sup>Read before the Missouri Institute of Homeopathy.

lachrymation. I have wrought a cure in a number of cases of this character by a single application of the lunar caustic, or blue stick, followed by some bland ointment. Blepharospasm in these external eye diseases goes hand-in-hand with the intense photophobia. Relieve one and the other disappears too. Some cases may be benefited by the avoidance of direct exposure of the eye to light, accomplished by drawing the blinds while indoors, and wearing (dark) protective glasses while outdoors.

Blepharospasm which is symptomatic of extra ocular muscle strain, as a rule stubbornly resists treatment, probably due to the fact that the underlying disease is difficult to manage. But blepharospasm dependent upon errors of refraction responds readily to the indicated remedy, viz., the correct lenses.

Blepharospasm is often one of the symptoms of tic. In this it may sometimes be relieved by pressure on the nerve at the supraorbital motch or the infraorbital foramen. Blepharospasm as a reflex symptom of dental, nasal and pharyngeal lesions must not be overlooked. Chlorosis, anæmia and chorea frequently show it. It is specially prevalent in chorea. In "habit chorea" of children it excites more concern in the parents than it causes harm to the sufferer. If there be no discoverable cause the best remedy is to let the child severely alone. In some cases I have caused this ugly symptom to disappear by simply instructing the several members of the family not to remind the child of it in any manner whatever.

Akin to the foregoing is the hysterical form. Many are the vagaries of this symptom in this disease. There may be a number of pressure points to contribute to its diagnosis and relief. Tonic blepharospasm of hysteria may be so firm and persistent as to seriously threaten the integrity of the eye, entailing amblyopia ex anopsia or from pressure. In passing, let us simply remark that suggestion is here therapeutically indicated.

Neurasthenia may manifest itself by this symptom alone, else it is so prominent as to overshadow the others. My failure to banish the distressing blepharospasm occurring in a strenuous business man otherwise strong, sane and sound, led me to this conclusion. And in this type, unless there be a temporary (at least) change of vocation and environment, all other therapeutic measures will be in vain.

When blepharospasm presents itself as an essential neurosis the

operation of stretching the nerve is recommended, a procedure which has not been attended by gratifying results.

Our materia medica includes many remedies which merit consideration in the treatment of blepharospasm, among which I have used gelsemium, conium, hyoscyamus and spigelia.

Olivia Building.

"Curing" Enlarged Tonsils means curing the individual. Chronic remedies, antisycotics as well as antipsorics, are almost invariably general rather than local. Thuja, calcarea, sulphur, psorinum, iodine, silica, natrum muriaticum, natrum sulphuricum, aurum, etc., must be given to eradicate disease tendency which ultimates itself in chronic enlargement of the tonsils. The above list of remedies is what I have found to cover most of the cases of enlarged tonsils and adenoids, but I have always given the remedy on indications of a general rather than of a local character. It is rare that a single dose or a single remedy effects a cure; two years is about as short a time as such conditions can be eradicated, and that after a series of potencies and usually more than one remedy.

Tonsils which have undergone repeated suppurative processes and have become masses of hard cicatricial tissue may act as foreign bodies and require removal; but operative measures are not wise until after a course of careful prescribing has brought about a condition of health in every other way in the patient; it is not safe to remove even such a mass as this until you are perfectly sure that the system no longer needs it, that the time has come when it is really a foreign body, the result of

curative action, and is ready to be thrown off.

The following conditions have been present after surgical removal of adenoids which were not present before, and developed so soon after operation that it is at least worthy of consideration whether there is any cause and effect relation: chorea and epilepsy; chest conditions, such as bronchitis, pneumonia and asthma. Cases of asthma that were going to be "cured" by the removal of adenoids I have seen grow decidedly worse after such operative interference. Children that were going to be prevented from having frequent head colds I have seen afflicted with bronchitis and pneumonia after operation. The presence of enlarged tonsils or large adenoid masses is not of itself an indication for surgical interference; it is only when they have become foreign bodies, no longer capable of performing the functions for which they were certainly intended, and are a burden to the body that we are justified in removing them; and such cases are very rare indeed.—Henry L. Houghton.

### WOUNDS OF THE EYEBALL.\*

WILLIAM H. PHILLIPS, M. D.,

Cleveland, O.

OUNDS of the eyeball, from a foreign body lodged in the cornea to a rupture of the sclera, are, unfortunately, among the common injuries with which we have to deal. Upon the skill and judgment used early in their treatment depend many times a patient's usefulness to himself and family afterwards. The thing which distinguishes wounds of the eyeball from injuries of other portions of the body and makes their proper treatment of such grave consequence is the fact that not infrequently an injury to one eye entails the loss of both, and is there anything more terrible to contemplate than total blindness following a simple injury to one eye?

Foreign bodies lodged in the cornea rarely lead to bad results if removed promptly by a sterile spud. Perforating wounds of the cornea in which no foreign body remains in the eye are chiefly dangerous by reason—1st, of a possible injury to the lens; 2d, entanglement of the iris in the wound, or 3d, infection.

Perforating wounds or rupture of the sclera where no foreign body remains in the eye entail possible infection of the contents of the ball, intraocular hæmorrhage. dislocation of the lens, and, if in the region of the ciliary body, irido-cyclitis with subsequent atrophy of the eyeball and possible sympathetic inflammation of the other eye.

Penetrating wounds of the eyeball, whether through the cornea or sclera, where a foreign body remains in the eyeball and cannot be removed by the magnet or otherwise, entail certain loss of the injured eye and almost certain involvement and destruction of the other eye, unless the wounded eye be enucleated early.

Infection of the contents means the establishment within the ball of a suppurative inflammation, becoming often a panophthalmitis and lead-

<sup>\*</sup>Read before the Ohio Homœopathic Medical Society.

ing, after much suffering, to absolute destruction of the eyeball, and a possible secondary infection of the orbit and cranial cavity.

Injuries to the lens entail a traumatic cataract. In youth and early adult life, after injury, the lens swells up, becomes opaque and is absorbed in a variable period of time, leaving behind an opaque anterior capsule. In later adult life the swelling is greater, the hard lens is not easily absorbed, pressure upon the iris and ciliary body sets up an irido-cyclitis, and either an early removal of the lens or a later enucleation of the eye must be done to conserve the other eye. Dislocation of the lens from blows may be either backward into the vitreous or forward into the anterior chamber.

Dislocations into the vitreous are often tolerated for a long time without serious result beyond the disturbance of vision occasioned by loss of the lens; ultimately glaucoma or irido-cyclitis may develop. Dislocations into the anterior chamber are always serious. Glaucoma or iridocyclitis rapidly develop and destroy the eye unless the lens is early removed from its luxated position. The other eye may be lost through a sympathetic ophthalmia.

The well eye is endangered whenever a plastic iridocyclitis develops in the injured eye. Such irido-cyclitis is especially liable to occur:

- 1st. In penetrating wounds of the sclera in the ciliary region.
- 2d. In penerating wounds of the eyeball anywhere, if a foreign body still remains in the eve.
  - 3d. In luxations of the lens, especially into the anterior chamber.
  - 4th. In wounds when the iris is left entangled in the cicatrix.

A man of forty-five was driving a staple into a barn door. Striking it a glancing blow, it flew sidewise, and struck his eye, penetrating the cornea and lens near their center. I saw him a week later. The lens was swollen and opaque; there was increased tension and a terrific iridocyclitis, the pain nearly driving him frantic. Enucleation was done immediately to save the other eye.

A man of sixty was chopping kindling wood. A piece flew and struck his closed eye, cutting the upper lid. Some pain and disturbance of vision followed. Five days later pain had become severe. He consulted a physician, and was referred to me. Examination showed a partial dislocation of the lens through the pupil into the anterior chamber. Increased tension and moderate iridocyclitis were present.

As the patient was intelligent, it was decided, after explaining matters to him, to make an effort to save the eye, and to this end the lens was removed with some difficulty, and the patient put to bed. Atropin and hot compresses were used and bell. given internally, with gradual abatement of the pain and inflammation. The other eye was watched carefully for signs of sympathetic irritation, but none appeared. At the end of two weeks, the eye having nearly cleared up, although still slightly painful, he was allowed to get up, and, after being carefully instructed as to the possible danger to the other eve, was told to report at the office in a week. I never saw him afterwards. It seemed that as soon as possible after my last visit, he packed his grip, and forgetting he owed me a bill, went back to his home in the country. Six months later I learned from another patient from his neighborhood, that shortly after his return, the injured eye began to pain him severely, and at the same time the good eye became inflamed. He is now hopelessly blind. the result of a sympathetic ophthalmia.

A man was struck in the eye by a narrow chisel. I saw him a few hours later. The cornea had been penetrated near the margin and the iris had prolapsed into the wound. The lids and side of the face were scrubbed with bichloride, and the eye, after being cocained, was irrigated with bichloride 1:5000. The replacement and retention of the iris proved to be impossible. The prolapsed portion, therefore, was drawn out and excised and the margins carefully replaced. The eye was bandaged and the patient put to bed. Recovery was uneventful with  $^{20}/_{20}$  vision.

A man was struck over the outer canthus by a closed fist. Examination showed a rupture of the sclera and conjunctiva extending from the corneal margin outward 6 or 8 mm. The inner tunics bulged into the wound. No dislocation of the lens could be made out, and no prolapse of the iris. The fundus could not be seen, probably from intraocular hæmorrhage. Vision was reduced to shadows. It was a question as to whether enucleation had not better be performed at once, as the wound was in a dangerous region, and it would be a difficult matter to close it without incarceration of the ciliary body. However, it was decided to be conservative, so after sterilizing the field sutures were passed through the conjunctiva and outer layers of the sclera, ice compresses were applied and aconite given internally. In two weeks the wound had healed. Vision was  $^{20}/_{200}$ . There was no pain nor ciliary injection. He was warned of the possible involvement of the other eye.

and instructed to appear at one if inflammation recurred in the injured eye, or any disturbance of vision or sensitiveness to light developed in the other eye. He was seen six months later and reported no trouble. His vision was not taken.

A boy of fifteen was struck in the eye by a slug from an air-gun. The anterior chamber was full of blood and the conjunctiva congested. Neither the sclera nor the cornea was penetrated.

Aconite, ice, rest in bed and atropin were employed. At the end of four or five days the blood had become sufficiently absorbed to show several rents in the iris, and an opaque and swollen lens. Dilatation of the pupil was maintained during the process of absorption of the lens. Four months later an opaque capsule was incised, giving a clear pupil and  $^{20}/_{30}$  + vision with a correcting lens.

These few cases picked at random from my case book serve to show the treatment of a few of the serious injuries to the eyeball. It is often a difficult question to decide whether we shall at once sacrifice an eye, offering the prospects of serviceable vision, or run the risk of a sympathetic inflammation. Much depends on the intelligence and cooperation of the patient. A foreign body lodged in the eye which cannot be removed always demands enucleation. A penetrating wound of the ciliary body followed by iridocyclitis demands enucleation. Moderate iridocyclitis following other injuries may be treated conservatively, always bearing in mind that you are playing with a dynamite bomb ready to scatter destruction with but slight warning.

1018-1020 Rose Building.

A Dermoid Cyst of the Orbit, in a boy 6 years old, presented all the signs of an empyema of the anterior ethmoidal cells, as it appeared as a firm, circumscribed, non-movable tumor, in the upper, inner angle of the orbit, directly over the region of these cells. The true nature of the case was only revealed at the time of operation. Rapid and uncomplicated healing followed the complete extirpation of the growth by Dr. Posey.

Office Examination with the Microscope of conjunctival secretion may decide promptly both diagnosis and treatment. In case of further doubt a blood serum tube may be inoculated and sent to a bacteriologist. The number of bacteria causing ocular inflammation is relatively small. The gonococcus calls for argyrol or silver nitrate, the (Morax-Axenfeld) diplobacillus for zinc (sulphate).



Conducted by G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

Chloride of Ethyl Anesthesia in Laryngologic and Otologic Practice. Neuenborn in his comparison of chloride of ethyl with other anesthetics says:

(a) Advantage over laughing gas. The narcosis is quieter and with out symptoms of suffocation, opisthotonos and jactitation. There is no elaborate apparatus necessary, and anesthesia lasts twice as long.

(b) It has the following advantages over ether: It is pleasanter, complete anesthesia is attained much more rapidly and without excitement, there is no excessive secretion of mucus, it leaves behind no unpleasant taste and smell, the after-effects are, in general, much pleasanter.

(c) It excels chloroform in the following particulars: It can be given in any position of the patient, anesthesia is induced much more rapidly and comes without excitement, it can be given in definite amounts, it is much safer, the after-effects are slight. To this should be added that ethyl chloride has many advantages over ethyl bromide: it is much pleasanter, there is no stage of excitement, there are no unpleasant phenomena such as apnea and convulsions. after-effects slighter; patients do not fear narcosis subsequently so much as with ethyl bromide, erotic manifestations are absent or come only occasionally.

S.

Pharyngitis Sicca. Chauveau reports the following case: A man of 62. clerk, presented himself for intense dryness in mouth and throat. and complained of a band around neck which disturbed deglutition. The saliva was very acrid. Examination of the pharynx did not show any disease, but the mucosa was sombre in color, dry and of a varnished appearance.

Urinalysis shows chlorides below normal. Inquiry brought out the fact that salt made up no part of the diet. A hyperchlorate diet was at once prescribed with most remarkable results. In three weeks the pharyngeal mucosa became rosy in color, much more humid, and the saliva reappeared. Taste came back. In a word, all symptoms disappeared.

Sepia in Phlyctenular Keratitis. In the spring and early summer many children are afflicted with inflamed eyes accompanied by photophobia and lachrymation. Inspection of the cornea discloses a string of little vesicles or superficial ulcers at the margin, with localized

ciliary injection. Sepia is a good remedy, as is also nux vom. Careful diet and plenty of fresh air and sunshine are essentials to a perfect cure.

The Efficiency of Salicylate of Sodium in Inflammatory Eye Diseases. H. Gradel declares that the disease in which salicylate of sodium has proven itself superior to any other therapeutic agent is irido-cyclitis due to traumatism with infection, as well as in sympathetic disease secondary to it. The writer has watched sympathetic inflammation from the day of the start to its termination in three patients treated by salicylate of sodium. All three recovered with perfect sight. He knows that the first remained well at least five years, the second nearly three years, while the third died, with sight intact, nine months later. Even in so small a number of cases in a disease so dangerous to sight invariable recovery is the strongest possible proof of the efficacy of the treatment.

—Illinois Medical Journal.

The Sterilization of Flexible Catheters. Adrian recommends the following procedure: The instruments are subjected to the vapors arising from a I or 2 per cent. formalin solution at a temperature of 60° to 75° C. An exposure of three minutes suffices to insure destruction of all germs, the instruments are not damaged, and the amount of formalin adhering to them is so slight that it is not necessary to rinse them off in sterile water.

Fatalities Which Have Occurred Under Ethyl Chloride. T. D. Luke has gathered the records of twenty-two fatal cases, which he sum-Nevertheless, he considers it far safer than chloroform for short operations. His personal experience embraces over 2,000 administrations in all classes of patients, and he has never seen a single fatality. In two instances there was a temporary arrest of respiration with considerable cyanosis and widely dilated pupils. He notes that dangerous symptoms, when occurring, come on with a rapidity not exceeded by the onset of dangerous symptoms in chloroform cases. Of the twenty-two cases referred to, eight occurred during dental operations. He figures out the mortality rate as about one to 8,000 administrations. He notes that the same conditions seem to obtain as with chloroform, in that the accidents have occurred in nonalcoholics, without constitutional dyscrasia, who have died from a sudden and unpreventable syncope. He would discourage the promiscuous and irresponsibe use of all this class of anesthetics.

Dionin in Senile Cataract. Dr. Oscar Wilkinson, of Washington, D. C., in an article on the preventive treatment of senile cataract, read before the District Medical Society on October 18, 1905, said that he would be inclined to use dionin in a case where the lens is much swollen, as he thought it would possibly have some effect in reducing the active inflammation within the eye, and thus assist the general treatment. S.

Argyrosis from Argyrol. Dr. Posey reports a case of argyrosis after the drug had been used in 25 per cent. solution, twice daily, for two and one-half months..

Morax-Axenfeld Conjunctivitis. "Conjunctivite subaigue," "angular

conjunctivitis," or "diplobacillary conjunctivitis."

Morax and Axenfeld independently discovered a micro-organism which they were able to associate with definite clinical conditions of the conjunctiva and lid margin.

The symptoms are: a burning in the eyes, generally worse in the morning; frequently a feeling of fine granules of sand rubbing against the eye; often there is a discharge from the eyes and morning agglutination.

As a rule, we see both eyes affected, although the onset is not necessarily synchronous. The conjunctiva is slightly hyperæmic and somewhat thickened near the ciliary margin, assuming that velvety appearance so frequently met with in chronic catarrh. It is moderately dry, but flakes of a moist mucoid secretion, yellowish gray in color, frequently thick and tenacious, are found in the lower cul-de-sac or often about the inner canthus. This secretion may be expelled by the forced contraction of the lids, produced by the irritation which the disease causes. When expelled, the discharge gathers upon the lid margin and hardening, is seen as brownish yellow crusts. The skin at the palpebral margin shows an erythematous, excoriated surface at both angles, but more noticeably at the inner, frequently to such a degree that a satisfactory natural view of the caruncle is almost prohibited; hence the old and still frequently employed term of "angular" conjunctivitis. bulbar conjunctiva seems to be less perceptibly affected, and only occasionally one notices a slight redness and an engorgement of the superficial veins in the neighborhood of the lid angle, and more rarely are there phlyctenules.

The disease is one of those subacute forms which border on the chronic type, yet one does occasionally come upon acute manifestations.

Ulcers are rare; when they do occur, they are, as a rule, very benign, near the corneo-scleral margin, show very little loss of tissue, have a smooth, glistening base and regular edge, and heal rapidly under suitable treatment. There are cases much more severe, with hypopion and iritis, and the diplobacilli have been found in scrapings from the bases of the ulcers. These ulcers, however, are generally round, they do not tend to spread, and in nearly every case heal under zinc therapy.

When follicles are present in any numbers in long standing cases one

should expect the diplobacillus is a coincident infection.

The bacilli are detected, as a rule, in pairs, although they are occasionally met with in the form of chains, but always with a distinct area of intersection between each component part. The bacilli are regular and plump, with rounded square ends, like a depressed right angle, and have a definite thickness throughout. Occasionally the ends appear

somewhat swollen, and now and then the poles take the stain a little more intensely. The whole bacillus, however, stains so deeply that it is difficult to differentiate on this matter. The diplobacilli are decolorized after the use of Gram's solution. As to whether the diplobacillus has

a capsule is still a point at issue.

This diplobacillus can only be grown at blood heat on serum or on a medium of agar containing serum, as well as in such media as hydrocele and ascitic fluid. It requires an alkaline medium; grows best on Læffler's alkaline blood serum. The first evidence of growth is noticed in twenty-four hours, when areas of unevenness are seen on the surface of the serum; these areas are moistened and depressed, and, becoming larger, they liquefy and tend to coalesce without any change of color; the surface of the medium has the appearance of having been gouged out. On serum agar the colonies of this diplobacillus are of smaller size; they appear as opalescent, flat droplets, of grayish color, and somewhat resemble the pneumococcus growth. On magnification they are seen to be grnular, of rounded shape and smooth edge, and are slightly prominent, with a tendency to coalesce.

In serum bouillon, after twenty-four to forty-eight hours, a distinct cloudiness is apparent and a somewhat fine deposit forms, which can be

readily shaken up.

Cilia and spore formation have never been shown to exist. diplobacillus stands drying well. It may be distributed through the air by talking. So may other bacteria. Hence a "mundschleir," or mouth veil, should be worn; this consists of a bow of wire passing beneath the nose over the upper lip and behind both ears; from this one or two thicknesses of sterile gauze are suspended, covering the mouth, mustache and beard to prevent bacteria being carried to the patient from the operator in the act of speaking.

The only bacilli which resemble this one in shape and size, and which are decolorized by Gram's solution, are Friedlænder's pneumonia bacilli, the so-called ozæna bacilli and the bacillus liquefaciens of Petit. The two first mentioned have a well-defined capsule, they appear to flourish on ordinary media and are pathogenic to animals. Those best acquainted with the bacillus liquefaciens of Petit say that it grows equally as well on agar as on serum, and that it readily attacks the cornea.

Considering the fact that corneal troubles are noted more frequently of late complicating a Morax-Axenfeld conjunctivitis, Paul, in his recent article on the subject, begins to doubt if the two are not after all, identical or if that of Petit is not a so-called sport of the Morax-Axenfeld diplobacillus. McNab is coming to form the same conclusions and considers the Petit bacillus merely a more virulent form of the one with which I have been dealing.

Zinc seems to act as a specific in all these cases, and when employed systematically will invariably cure the disease. 0.25 per cent. to I per cent. solution of zinc sulphate are instilled into the conjunctival sacs at frequent intervals. In some severe forms of cold compresses of the solution kept on the eyes constantly are of decided benefit. To obviate the element of pain which the zinc doubtless does produce, Peters and Sehlen have recommended an ointment of ichthyol ammoniacal, amidon, oxide of zinc and vaselin.

Microscopically this form of conjunctivitis is to be differentiated from Koch-Weeks' conjunctivitis, blenorrhoea, conjunctivitis pseudomembranosa, and trachoma.—Fred. T. Tooke, in The Ophthalmic

Record.

Dionin aids eserin to contract the pupil in glaucoma, and it will also assist atropin to dilate an adherent or blocked pupil in iritis. In each instance this is accomplished through its stimulating absorption and opening the lymph channels. Two drops of a 20 or 30 grain to the ounce aqueous solution of dionin may be instilled five minutes after the atropin. Intraocular pain is relieved by dionin, and sometimes the pain of a corneal ulcer.

Calcium Chloride as a Preventive Hemostatic. This agent is very soluble in water and readily tolerated by the stomach. It is well to bear in mind, however, that it is incompatible with milk. Often two days before the date of operation, and always on the preceding day, the patient is supplied with a solution containing three grams of the chloride, of which fractional quantities are taken during the twentyfour hours, the last dose being used a few hours before the operation. Toubert has tried this method of hæmostasis in operations for circumcision and for hypospadias; in internal urethrotomy, radical cure of hernia, hæmorrhoids, varicocele, hydrocele, appendectomy, in-growing toe nail, skin grafting by Thiersch's method, and osseous suture. It is stated that notwithstanding individual differences which occur in spite of the use of chloride of calcium, a very large majority of the patients benefited from the action of this agent, and that the coagulability of the blood was distinctly increased in all. There was never any necessity to interrupt the operation for more than a few seconds in order to clear the wound of blood, and in many instances the gauze pads were used for removing clots and not liquid blood. It was not found necessary to pack the wound after the operation in order to prevent recurrent bleeding. The number of buried ligatures was much reduced, and in some cases not a single vessel was tied.

After the use of chloride of calcium he has never observed any postoperative hæmorrhage and deep-seated collections of blood, even in parts such as the scrotum, penis and perineum, in which accidents are likely

to occur.

Roentgen Rays, Dosage of. The necessity for accurate doses and records of Roentgen rays in the scientific application of this therapeutical agent is emphasized by Carlo Colombo. The dosage of Roentgen rays can be determined in a variety of ways, but the most practical method

is that involving the use of chromoradiometers, such as that of Holz-knecht. This instrument measures the amount of radiations absorbed by the substance exposed, and a unit of measure known as the "Holz-knecht unit," which corresponds to No. 1 on the scale of the apparatus mentioned, may be employed for conveniently designating the comparative absorption of radiant energy by an organ or body exposed to the X-rays.

A number of factors determine the Holzknecht unit, in addition to the amount of rays produced by the tubes; for example, the distance of the irradiated surface from the focus of origin of the rays, and the direction with which these rays strike the exposed surface. High doses, from ten to fifteen units, at each sitting may be used in operable tumors in which the need of treatment is urgent. In all other cases the exposure should be limited to five units by the Holzknecht apparatus and in this way the serious complications which result from over-exposure to the X-rays avoided.

Formaldehyde in Internal Diseases. Jacob Zwillinger gives formaldehyde internally in cases of sore throat, catarrh of the bladder, erysipelas. scarlet fever, and diphtheria, and has also used it prophylactically for scarlet fever; in almost every case the results were favorable. The method of administration was by means of formamint tablets. each of which contained one centigram of formaldehyde. Three cases of angina catarrhalis and four cases of angina lacunaris showed improvement after eight to ten tablets had been given in each; the fever, swelling and pain rapidly disappeared, and solid food could be taken on the second day. In no case were local applications made to the throat. In such affections the formadehyde set free in the mouth as the tablet dissolves exerts a direct disinfectant and bactericidal action, and it is well, therefore, to tell the patients to keep the tablets in the mouth as long as possible. The pleasant taste of the tablet makes this easy even for children. The patients treated for scarlet fever were children of ages varying from five to ten years. In the stage of fever the tablets were taken every hour until five had been taken; the interval between the doses was then increased to two hours until the temperature became normal, when it was again increased, this time to three hours. In the early stages the effect of the drug was good, and a critical fall of temperature usually occurred on the third to fourth day; but the later stages of the disease did not appear to be influenced.

In ten cases of diphtheria the treatment by formamint tablets was employed as a substitute for local treatment by disinfectant gargles, and in some of the milder cases antitoxin was dispensed with. In all cases the improvement was rapid, and in none did any post-diphtheritic paralysis occur. Also, the tablets were given in five cases of cystitis, two of gonorrhœal origin and three following on spinal paralysis. Of the gonorrhœal patients one discontinued the treatment after a few days in which no improvement occurred, the other fully recovered after four-

teen days' use of the drug. Two of the three spinal cases had been previously treated for long periods without result by means of urotropin, washing out of the bladder, etc., and in both after a fortnight's use of the formamint tablets the urine became clear and faintly acid, and the subjective symptoms disappeared. Two cases of erysipelas responded favorably to the treatment, and in one recovery occurred on the third day.

The author has twice used formamint tablets prophylactically, once in scarlet fever epidemic occurring in a hospital, and once when a case of scarlet fever developed in an over-filled house. On each occasion none of the people to whom the tablets were given and who had been within reach of infection contracted the disease.—Therap. Monats.

In Acute Nasal Catarrh camphor  $\theta$  in drop doses every fifteen minutes for an hour and then every hour for a few doses will abort the attack if given while the chill is on. With the chilliness is stopped nose, much sneezing and a fluent coryza.

Euphrasia: the eyes are red; profuse, acrid, excoriating lachryma-

tion; bland nasal discharges; sneezing.

Allium cepa is similar except that tears are bland while the discharge from the nose is exceedingly irritating and excoriating, and the whole condition better out of doors.

Both nux vomica and arsenicum have chilliness, fluent watery discharge from the nose, obstruction and acridity. But with arsenicum there is much burning and a midnight aggravation; while nux is aggravated in the morning, the nose is more stopped in the morning, and the sneezing and discharge are better in the open air.

Mercurius comes in if, in addition to the sneezing and fluent discharge, there are sore throat, redness, swelling and soreness of the alæ

nasi, offensive odor and evening aggravation.

Hepar is indicated when the nose is very sensitive to touch; aggravation from cold air, headache from every breath of cold air; one nostril stopped, the other open.

Kali bichromicum has yellow, ropy, stringy or lumpy discharges;

pressing pains over the nose and in the forehead.

Sticta pulmonaria has this same pressure over the nose and in the forehead, but it is of the dry kind; there is sleeplessness from a nervous state, and a dry night cough.

Pulsatilla: mild, bland, thick, profuse, greenish-yellow discharge,

with little discomfort: it only "runs."

After one or more turbinated bones have been sawed out, the nasal mucous membranes burned, the tonsils amputated, etc., there is still hope of restoration of function and order from such remedies as sulphur, lycopodium, cyclamen, kali bichromicum, natrum muriaticum, silicea, and corallium rubrum.

If there is considerable febrile excitement aconite is a good starter, of course other symptoms agreeing.

Nearly all our remedies in throat troubles have an aggravation from swallowing. But there is one inconsistent in this respect and feels better for swallowing, sometimes the only relief obtained is from repeated swallowing in order to dislodge the lump that seems to be in the throat. The tonsils are indurated, there are frequent twitchings and sighings and you have your Ignatia case.

Belladonna: rush of blood to the head, throbbing carotids, moist skin.

delirium, swelling of the tonsils (particularly of the right).

Apis: stinging pain, much cedema, sensitiveness, and absence of thirst.

Lycopodium has pain and swelling extending from right to left; always worse in the afternoon particularly from four to eight o'clock

Lachesis: pains and swellings extending from left to right; aggra-

vation after sleep and from touching the front of the neck.

The odor, tongue, swelling, free salivation, aggravation at night and sweat without relief point clearly to *Mercurius*.

Lac caninum: if there is a constant alternation of sides.

Phytolacca: burning like fire in the throat, aching at the root of the tongue, dryness, whitish or grayish spots tending to coalesce. and sharp pains running up to one or both ears.

Baryta carbonica: a young person beginning to look old; tonsillitis, after every cold, suppurating tonsils, indurated cervical glands, par-

ticularly on the left side.

**Decaying Teeth.** Thuya: when the decay is at the root of the tooth. Kreosote: when the decay begins almost as soon as the teeth appear. Staphisagria: stops pain in hollow teeth. It will also remove excrescences and painful nodosities of the gums.

Tuberculinum: black teeth, crumbling of the front teeth, little round

shallow holes or pits in the enamel.

Silicea and fluoric acid for fistula of the mouth.

During the conduct of a narcosis, more important than the activity of the conjunctival reflex or the actual size of the pupil in determining the depth of the anæsthesia, are the *changes* in the reactibility of the lid and the alterations in the size of the pupil. They are reliable indices to fluctuations in the depth of the narcosis. Sometimes a patient is quite relaxed and anæsthetic although a fair conjunctival reflex is present; and, again, it may, occasionally happen that a patient reacts even when the reflex is abolished.—American Journal of Surgery.

One Case of Cerebrospinal Meningitis is reported by William Campbell Posey, in which there was marked mydriasis with wide dilatation of the palpebral fissure on both sides. Probably due to stimulation of the cervical sympathetic.

# SOCIETIES.

ATTENTION, MEMBERS OF THE O., O. AND L. SOCIETY.

The official headquarters of the American Homocopathic Ophthal-mological, Otological and Laryngological Society, while in session at Atlantic City, September 11th to 15th, will be the well known and recently greatly enlarged Hotel Dennis, where all the elect are expected to take up their residence and be social. Rates will be reduced for our benefit, and will range in price, according to size and location of rooms, from \$3.00 to \$5.00 per person, per day, for board and room. As there are yet many summer visitors in Atlantic City during the second week of September, reservations had best be obtained as long in advance of going as is possible, and while we can all be nicely accommodated, with our wives and sweethearts, if we notify the proprietor in time, trouble may be experienced in getting suitable rooms if we wait until the last moment.

Excellent rooms for the scientific sessions have been secured, and the secretary has already received many good papers, while a long list are nearly completed and will be presented at the sessions. In addition to the usual class of papers, short papers devoted to the discussion of matters near to our hearts will be presented on two evenings during the week, viz.: Cases cured by the internal administration of the homocopathically indicated remedy, one evening, and cases not cured by any method of treatment will come up on another evening, both to be limited to seven minutes in the detail of the cases. The relation of our successes and failures is highly instructive and all enjoy them. Select your topics and send the mto the secretary for placing on the program.

It is expected that one afternoon will be devoted to clinical work, and it is likely that the beautiful new operating room at Galen Hall, the homoeopathic sanitarium hotel of Atlantic City, will be used for that purpose.

Out of respect for the International Homoeopathic Congress, we will hold no morning sessions, and urge all of our members to attend the sessions of the Congress during that time, as the subjects under consideration by that body will be of paramount interest to us all.

Promising you a vast amount of interesting matter good for your mind and the very best for the comfort of your bodies, I urge you to be on hand for the opening session, Tuesday afternoon, September 11th, at 2:30 o'clock.

Fraternally yours,

JOHN B. GARRISON, M. D.,

President.

DAVID W. WELLS, M. D., Secretary.

Officers of the Alumni Association of the New York Homœopathic Medical Hospital and College were elected on May 17, 1906, as follows:

President, Charles Francis Adams, Hackensack, N. J.

First Vice-President, W. B. Winchell, Brooklyn, New York.

Second Vice-President, George Royal, Des Moines, Ia.

Third Vice-President, F. A. Faust, Colorado Springs, Col.

Executive Officer, E. G. Tuttle; he declined and the association directed the board of directors to appoint an executive officer.

Treasurer, Bert. B. Clark, 166 W. 126th street, New York.

Recording Secretary, P. C. Thomas, 243 W. 99th street, New York. Corresponding Secretary, J. Wilford Allen, 117 W. 12th street, New York.

Necrologist, John Hutchinson, 78 E. 55th street, New York.

Alumnus Trustee. W. W. Blackman, 519 Clinton avenue, Brooklyn. Directors, E. Rodney Fiske. H. B. Minton and H. J. Pierron, of Brooklyn; N. H. Ives, Mt. Vernon; F. K. Hollister and W. I. Pierce, of New York.

For Four Hundred Years physicians in Europe stopped thinking and let Galen do their thinking for them. Shall we stop reasoning because Hahnemann thought for so many a hundred years ago? We best honor his memory and worthily continue the traditions of our departed leader by studying the new physiology, pathology and bacteriology so that we give the homoeopathic system its rightful place among the medical sciences.—George F. Laidlaw.

### INSTITUTIONS.

NOSE, THROAT AND EAR CLINIC OF THE COLLEGE OF HOMEOPATHIC MEDICINE AND SURGERY, UNIVERSITY OF MINNESOTA.

Dr. L. D. Shipman's report for the year ending April 1, 1906, states that this department has grown to be as large as any clinic in the dispensary, if not the largest. This means to those experienced in dispensary work, that Dr. Shipman and his assistants have probably been the most assiduous and regular in their attendance and attention to their patients. Clinics were held twice a week throughout the summer as well as during the college term. Students have assisted each month, and have been assigned patients for treatment under the personal direction of the clinician, who also gave several lectures.

We, in confessedly catarrhal cities, are interested in noting the relative preponderance of catarrhal troubles in Minneapolis, as shown by this report.

Of 224 cases of nasal affections. sixteen were acute and subacute rhinitis; forty, simple chronic, and fifty-three, hypertrophic rhinitis; thirty-two. nasal polypi; forty-three, atrophic rhinitis, and four ozaena.

Of 122 "nasopharynx," forty-three were post-nasal catarrh.

In the 69 laryngeal cases, seventeen were acute or subacute laryngitis, and of the 299 middle ears affections, there were one hundred and thirty-four chronic non-suppurative catarrh, one hundred and twenty-five chronic and twelve acute suppuration, eight acute otitis media, seventeen Eustachian stenosis, two mastoid disease, and one polypus. The total number of diseases treated was 1,078.

Couch's Improvement of the Paquelin Thermocautery. A modification of value was made five years ago by Dr. Louis B. Couch, of Nyack, N. Y. It consists simply in connecting the usual Paquelin apparatus with a tank of compressed air, the supply from which can be easily and delicately regulated to a nicety: the point can be maintained evenly for fifteen or twenty minutes at any desired heat, from dull cherry red to white hot. Dr. Couch has used this for the past five years in throat and other surgical work with unqualified satisfaction, doing away with the rubber bulbs.

# CORRESPONDENCE.

# "SHALL OPTOMETRISTS CALL THEMSELVES DOCTORS?"

Under the above title a writer in the Optical Journal says: "There is no reason why every qualified optometrist in the land should not call himself doctor and maintain the dignity of his profession. But so long as we, as a profession, cater to the whims of every little pill-roller physician in the country we may expect to be ridiculed and laughed at.

"My motto is to cut loose from the physician—oculist or what not—and give them to understand that we know something, too. Let every man of us, who can live up to our professional claims and 'make good,' prefix the 'Dr.' to his name, and teach the upstart physician that he who?] is one of the people and must be respected.

(Signed) DR. ——.'

A state optical society reports the application of an optician for membership on the condition that his name bear the prefix "Dr.," having received this title from an optical school in Pennsylvania.

It seems that the "Dr." does not go in New Jersey. It is used freely in Pennsylvania by any who care to assume it, and passes for the real article if the claimant also has the semblance of a diploma. These seem to be plenty and cheap. An optical journal has been carrying the advertisement of a house that offers to furnish them in any number from one up. They can be obtained in blank and filled in by the purchaser. or the dealers will fill in to suit.

An optical "college" in Chicago offers, on receipt of five dollars, to send a diploma with the degree of "Doctor of Optics" to all applicants. There are absolutely no conditions except the V.

Colorado has set an excellent example in forbidding the use of the title "Doctor" to those engaged in any branch of medical practice, unless they have complied with the medical practice act.

H. M. CHAMPLIN.

Bloomsburg, Pa.

# PACIFIC COAST JOURNAL OF HOM COPATHY.

San Francisco, Cal., May 25, 1906.

Dear Doctor:

The annual meeting of the California State Homoeopathic Medical Society was held on May 16th, at the secretary's office, in this city, while the ruins of our city were still smoking, people were still cooking on the sidewalks, regulars were still keeping guard and candles were still the only means of lighting our homes. The meeting was well attended, and the entire day devoted to a discussion of "What to Do Next" to maintain the various interests of our school in this state, more particularly in the metropolis, the home of our college, of our hospital (now badly shattered and put out of commission by the earthquake) and of our journal.

In the course of a discussion on the immediate needs of the Pacific Coast Journal of Homwopathy, and following a motion to appropriate for its relief nearly all the funds of the State Society still in hand, amounting to about \$150.00, Dr. H. R. Arndt, the editor of the Pacific Coast Journal, made a statement in substance as follows:

The Pacific Coast Journal has been wiped out by the fire, losing all its paper. manuscripts, plates, etc., the only thing remaining being an indebtedness for work already done.

It has not been possible to make the journal selfsupporting because

- (1) the expense of publishing is much larger here than in the East;
- (2) the income from advertising much less than that of Eastern journals, chiefly because of the impossibility of securing a subscription list large enough to appeal to the average advertiser.

The homoeopathic fraternity on this coast is numerically far less strong here than in the East, is much less effectively organized than in the East, much less cohesive because widely scattered, and, in many cases, difficult to reach; it alone cannot make the journal a profitable business venture if every homoeopath on this coast became a paying subscriber.

The regularly recurring and often large deficits have heretofore been met by the trustees of the Hahnemann Medical College of the Pacific and the directors of the Homœopathic Sanatorium. The losses sustained by the earthquake and fire render it impossible for the trustees, under whose charge the now nonproductive sanatorium has also passed, to meet any *Journal* deficits for some time to come.

For the above reasons Dr. Arndt advised that the Pacific Coast Journal of Hommopathy be discontinued.

The members of the State Society who were in attendance unqualifiedly opposed the suggestion made by Dr. Arndt, and unanimously pledged themselves to make every effort in their power to save the Journal. The belief was expressed by the more than fifty members present, representing San Francisco, Sacramento, Oakland, San Jose, Berkeley and other citites, that the Journal, aside from its recognized journalistic and professional merits, is invaluable as the only medium of communication between our scattered membership on this coast and that it must be enabled to resume publication at the earliest date possible. To bring this about, a committee was appointed (Drs. Pliny R. Watts, of Sacramento; Geo. H. Martin, of Oakland, and Alice Goss. of San Francisco), whose duty it shall be to systematically solicit subscriptions in all the Pacific Coast states; and the editor of the Pacific Coast Journal was directed to appeal to each member of the profession in the East, for at least one year's subscription to the Pacific Coast Journal.

It is in obedience to this instruction that the undersigned asks of you, for the sake of homoeopathy on the Pacific Coast and all that it represents to the profession at large, to give us at last one year's subscription. A reasonable response on the part of our brothers in the East, who have already remembered us so generously, will enable us to carry on our work and to hereafter once more bear our own burdens. At this time we are unable to meet all the emergencies which have so unexpectedly and with such crushing force come upon us.

If our appeal touches you, kindly fill the enclosed blank and send to the business manager of the Pacific Coast Journal of Homeopathy, Dr. Chas. L. Tisdale, Alameda, Calif.

By direction of the "Committee on Subscription to the Journal."

H. R. ARNDT,

N. W. Cor. Hayes and Fillmore Sts., San Francisco, Calif.

San Francisco. Cal., May 29, 1906.

Dear Doctor Moffat:

I am in receipt of your very kind favor of the 14th inst. I thank you in advance for your very thoughtful presentation of books, and am

sure that they will prove helpful to the various physicians who will receive them. I cannot tell you how warmly I appreciate all of the generous thought and gifts of my friends of the East for the physicians of the West.

Personally, I need no help, and am very glad to direct, in a measure, that which you choose to give to those in San Francisco, who are certainly needing assistance.

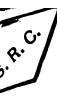
I know of nothing that needs help more than our hospital in its restoration. We were to move in on the very day of the earthquake. It was complete and furnished throughout, and every effort had been made towards making it a most complete thing in the West, and just at the dawn of our rejoicing came the injury to it to the extent of \$15,000. I hope some way will later be found to bring about the consummation of twenty years of my hopes. I thought they were about to be realized. Please remember me in all kindness to my friends, and remember that I appreciate your kindness more than I can tell you.

Very cordially yours,

JAMES W. WARD..

Dr. Eleanor F. Martin writes from Oakland, May 14, 1906:

In many cases books or instruments would be much more acceptable even than money, as quite a number have lost their offices but not their homes, and hesitate about accepting money, though I am quite sure they would not refuse to accept the necessary aids to their work.





# The Homeopathic

# Eye, Ear and Throat Journal.

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Lancaster, Pa., and New York, Aug., 1906.

No. 8.

# EDITORIAL.

THE O., O. AND L. SOCIETY'S TEST PROVING OF BELLADONNA.

FTER half a dozen years of such arduous labor as to bring him well within the verge of nervous prostration our esteemed friend, Professor Howard P. Bellows, of Boston, announces that the manuscript is at last ready for press, and that the book will be distributed before the Atlantic City meeting of our Society, of the Institute, and of the World's International Congress of Homocopathy—provided that enough subscriptions are received in time.

We urge every student, teacher, specialist, and general practitioner who is interested in pure drug pathogenesy and in bringing homoeopathy up to date, or who cares to be up to date himself, to send at once to Dr. H. P. Bellows, 220 Clarendon street, Boston, his subscription "with the understanding that the price shall not exceed five dollars per copy, and agreeing to send remittance when notified that the book is ready for delivery." Subscriptions are coming in steadily, but too slowly; the price is to be determined by the number of subscribers, and will be only two dollars if one physician subscribes out of every five homoeopathists who received the circulars. By vote of the Society the book is to be furnished as nearly as possible at cost price; should, by chance, there be any profit that will be devoted to the cause of drug-proving.

Not only are the narratives of the fifty-three provers given, but the symptoms have been painstakingly analyzed and arranged by the editor upon original lines, which show profound thought and mastery of this difficult task.

The book, a large octavo of 700 pages, will be about the size of one of Hering's volumes of The Guiding Symptoms, and consists of seven chapters and appendix.

Not only will the symptoms appear in the old—anatomical—schema, but also arranged in a new schematic form—physiological or systemic—which will prove easy of reference and understanding and of practical utility to the practitioner.

Many new actions of belladonna were noted by the specialists examining provers as a matter of routine when the prover had not called attention to the condition; this routine examination by modern instruments of precision is the fundamental idea of this enterprise and destined, in our opinion, to be necessary hereafter to any proving which would aspire to be considered scientific.

This book, we believe, will prove an important factor in the acceptance of homoeopathy by the scholars of the dominant school of medicine; they are already beginning to write\* that it is well to familiarize one's self with homoeopathy. A copy should be on the shelves of every medical library in the world.

#### MANUEL GARCIA.

N the first of July, 1906, Manuel Garcia died at his home, Mon Abri (My Shelter), Criklewood, Middlesex County, England, in his 102d year. Born in Madrid, Spain, March 17, 1805, the son of a celebrated composer and singer of the same name, his education as a professional singer developed a tenor voice of exceptional quality.

In 1825 (when Beethoven, Schubert and Rossini were writing) he came to this country and sang, in the Park Theatre. New York, Figaro to his sister's (Malibran's) Rosina and his father's Almaviva. This presentation of Rossini's "Barber of Seville" was the first appearance of Italian opera in the United States.

With the ambition of the born vocalist he overworked his voice, which was not a strong one, and in 1829—upon professional advice—he gave up the stage and devoted himself to teaching; in which vocation he has no equal either in achievement or length of career.

In 1825 he was made Professor of Singing at the Paris Conservatoire. In 1840 he read a "Memoire sur la Voix Humaine" before the French Academie; seven years later he published his "Traité Complet de l'Art

<sup>\*</sup>See editorial in Sajous' Monthly Cyclopedia, June.

du Chant," which gained for him a world-wide reputation; and in more recent years appeared his "Hints on Singing," which is to-day a standard work of extreme value to vocalists.

The progressive influence of Manuel Garcia has been felt as much, nay more, in the medical world through his epoch making invention. in 1854, of the laryngoscope.

This simple instrument, evolved in his study of tone production, has been the foundation of the science of laryngology, and is indispensable to the rhinologist and otologist as well. For this he will be remembered as long as modern medicine is practiced.

Both the medical and the musical worlds united to show their appreciation and regard.

In 1894, when he entered his ninetieth year, his brother professors at the Royal Academy of Music seized the opportunity of presenting to him some plate, a fitting tribute to his unique position in the world of music. Then came, on March 17, 1905, the celebration of the one hundredth anniversary of Professor Garcia's birth, when a portrait of the centenarian, painted by John S. Sargent and paid for by his admirers and friends in all parts of the world, was presented to him at a great gathering in London.

To this our American Homeopathic Ophthalmological, Otological and Laryngological Society contributed, and sent a congratulatory memorial.

In the rooms of the London Laryngological Society the celebration was attended by representatives of kings and emperors and by delegates from many musical and medical organizations throughout the world. Sir Felix Semon presided, and Professor Fraenkel, speaking for the Berlin Laryngological Society, congratuated Professor Garcia upon his "entering the second century of immortality."

Professor Garcia had already been made Honorable Commander of the Royal Victorian Order. Emperor William bestowed upon him the greatest honor possible in Germany when he presented to him the gold medal for science. From his own King of Spain Professor Garcia received the Royal Order of Alfonso. In addition to these dignities he had degrees from many universities and societies.

Preserving his faculties and interest in everything to the last he died full of honors and the satisfaction of seeing the benefit accruing to the human race and civilization from his labors—an exceptional reward, particularly to such a degree.

# WHAT IS THE RELATION OF THE GENERAL PRACTI-TIONER TO THE SPECIALIST?

WM. WOODBURN, M. D.,

Des Moines, Ia.

HAVE been led to select the title of this paper and in the form of an interrogatory, because of a number of personal experiences which I have had in the course of my relations with physicians doing general practice. I am thoroughly convinced by these experiences that there are hardly two physicians holding the same views as to what should be the proper relation betwen physicians recognized as general practitioners and the so-called specialist in certain lines of work, and am almost convinced that there can be no "exclusive" specialist.

There is, however, one broad proposition upon which we can all agree, viz., that the field of medicine and surgery is too broad for any physician or surgeon to possess or acquire equal efficiency and skill in all lines of work. We will all readily admit that every physician can do some things better than he can do some other things. To this extent we are all in a certain sense specialists. But leaving this general and broad proposition we are at once in the open field where no accord of views are held and possibly no agreement can be secured. But it is the hope that I entertain of bringing about a better understanding by a full and free discussion that I have selected my subject.

I do not think this paper can serve the purpose for which it is intended better than to briefly relate a few personal experiences which, I am convinced, are not individual to me in character, but more or less common to all physicians doing special work along all branches of medicine and surgery. I shall, for convenience, number them consecutively.

### EXPERIENCE NO. I.

At the suggestion of a former patient of mine, a mother brought her ten-year-old son to me for consultation concerning a persistent discharge from his ears. Examination revealed very large tonsils and much adenoid tissue obstructing the drainage from the middle ear. vised removal as the first step toward successful treatment of the ear The mother could not understand why, or how, a throat trouble could cause ear trouble, and left the office without a decision, only asking what I would charge. Sizing up the situation, not knowing anything of her financial circumstances, I told her \$20 for the operation and the regular fee for the necessary office treatment. Some months afterward a good friend of mine among the general practitioners met me on the street, and said to me: "Doctor, I have a patient who is troubled with enlarged tonsils and adenoids. What will you charge me to remove them." I replied, "Whatever the circumstances of the patient would suggest." He continued, "Will three or five dollars satisfy I, of course, thought that the patient referred to was some friend or poor patient whom he wished to favor, and promptly replied, "Certainly, if that is all they can pay, or, if they cannot pay, I will gladly do the work for nothing." To this he replied that "They could pay something," and when they came to his office again he would consult with them and report. A few days later he 'phoned me, saying the patient had been in that morning, and that he had arranged for them to come to his office at 2 o'clock to have the work done. Then, he knowing they had been to consult me previously, said, "By the way, Doctor, this patient has been to you before, and from you they went to Dr. ----, who advised as you did, but wanted to charge \$25. They then came to me, and I have tried to reduce the enlargements with remedies (he was a professor of materia medica), but have failed, and now advise their removal." I asked the doctor what price he had made the patient, and was informed \$15. I "corked" my chagrin, went to the doctor's office at the appointed hour, did the work, and a few days later received from the hand of the doctor the munificent fee of \$5. He retaining the \$10.

### EXPERIENCE NO. 2.

Another physician had his office girl summons me by 'phone to his office, with instruction to bring my mouth gag, tonsilotome and adenoid curette. On arriving, I was shown into the doctor's private office, and met the doctor, a father, mother and child about five years old. Without the ceremony of an introduction, the doctor addressing me, said: "Doctor, here is a little 'chick' who is troubled with adenoids and pos-

sibly enlarged tonsils, and I thought we should remove them." After spending at least twenty minutes in a vain effort to coax his little "chick" to climb onto the table and voluntary call for an anæsthetic, the child was placed on the table, chloroform administered, both tonsils and adenoids removed. I wrapped up my instruments and returned to my office to meditate. After about a week's reflection I called up the doctor and mildly asked the name of the parents. The doctor, anticipating my desire to know where I was at, informed me that he had arranged the fee, and that when he got it he would divide with me. Six or eight months later I received a check for \$6.25. In the meantime I had learned that the father of the little "chick" was a prosperous country merchant.

# EXPERIENCE NO. 3.

One day a physician walked into my office followed by a father carrying a little child abuot four years of age, screaming at the top of its voice. The explanation given by the doctor was that the child had been troubled with adenoids and consequent mouth-breathing, but that he had removed them, but still the child persistently breathed through its mouth. He was sure there was some obstruction in the anterior nares. and wished me to examine and advise him. No examination could be made of the anterior nares without an anæsthetic, as the child was frantic with fear. Nor could I see any evidence of such obstruction. I asked the doctor if. when he had removed the adenoids, he had examined with his index finger to be certain that he had removed all abnormal tissue. He replied that he had not, but that he was confident he had been very thorough, as he had vigorously scraped the posterior wall of the nasopharynx. I mildly suggested that some of the growth might easily have escaped, as I was confident this was the condition. I explained to the father that it would be necessary to administer an anæsthetic to examine the anterior nares, but that by holding the child an examination of the posterior nares could be made by simply hooking the forefinger behind the palate. He consented to the latter, but said if it was necessary to give an anæsthetic, that would have to be done later. On passing my finger into the posterior nares, a mass quite sufficient to account for all the trouble, was found, and I remarked to the doctor that "a little of it escaped you." The doctor then suggested that I take my curette and remove the growth, which I did, and I think the mass surprised the doctor quite as much as the father. A moral to

this case may be drawn: Never leave a case without passing the finger to make sure all abnormal tissue has been removed. The struggle all over, all left my office. On leaving, the doctor remarked, "I will see you in a few days, doctor."

A week, ten days, two weeks passed, when I 'phoned the doctor and asked him how he wished me to regard the case, as courtesy to him, as a consultation, or should I send a bill; if the latter, I should like the name and address of the father. The doctor replied that they had paid him for the work, and that whatever bill I had to send to him, which, of course. I understood as equivalent to an expected courtesy to the doctor, and dismissed the matter. I met the doctor a few days later on the street, and he mentioned the subject, remarking that the father was a poor farmer, and he thought to save him some money, and agreed to do the work for \$5, which amount he generously offered to divide with me, and which offer I graciously declined; at the same time I did protest to the doctor against his making such fees, and he frankly acknowledged it was a mistake, and promised he would not do so again.

#### EXPERIENCE NO. 4.

About two weeks after the experience just related I was called by 'phone to the office of this same physician. On arriving I was shown into the doctor's private office, and met a father, mother and little son about five years of age. The doctor introduced me to the parents, and related the history of the patient, which was the little boy, as follows: Since October, this was in March, there had been an obstinate and persistent otitis media (suppurative) which had resisted all efforts to control, and he had called me over to see the case. Without much preliminary conversation I asked the doctor if he had examined for adenoids as a possible cause of the persistence. The features of the boy strongly indicated the presence of nasal obstruction. To this the doctor replied that he had not, but that he had suspected their presence. It was explained to the parents, who were very intelligent, that by passing the index finger behind the palate a positive diagnosis could be made as to presence or absence of this possible cause for the ear trouble. This was done, and adenoids in abundance were present, as well as enlarged tonsils. After the diagnosis was made positive and the parents informed, the father, addressing me, said: "If that was your boy what would you do?" I promptly replied, "Remove them." His reply was, "Well, that is what we will have done, then. When can you

do it?" still addressing me. The time was arranged for I o'clock that day at the residence, where the family physician and I were to meet. We met according to agreement, and were not at the residence more than twenty minutes. Chloroform was administered, and everything went off without incident. On leaving the residence, the father said to me, not in the hearing of the family physician, "Doctor, send me your bill and I will mail you a check." On our return to our offices I asked the physician if anything had been said concerning the fee for the operation, and was informed that no arrangement had been made. I asked him what he thought would be fair under the circumstances, to which he replied, "Oh, he can pay \$10 all right." I protested that I thought \$25 would be a very reasonable fee, as the father was general agent of one of the prominent old line life insurance companies. The doctor then suggested that I make out my bill and hand it to him, and he would collect it for me. I did not mention the fact of what the father had said to me as we were leaving the residence. About a week later the parents brought the boy to my office and said they were not pleased with the condition; in fact, very much displeased, and had been I inquired if the physician had sent them to me, and found that he had not, but that they had been to his office and informed him they were coming, and had discharged him from the case. I felt keenly the embarrassment of the situation, and expressed it to the parents, and was informed that if I did not care to take the case they would go elsewhere. I inquired if the doctor had followed my suggestion as to the subsequent treatment of the ear, particularly inflation, and was told that he had not. They advised me that for several months past they had suggested, and finally insisted, that he call some one into the case, and on the morning when I was called to the doctor's office they had gone to him and demanded that he either call some one or they would exercise their right and go to some one of their own selection. And it was under the force of this pressure that I was called into the case. Under this statement I considered that I was justified in taking the case, and did so. I immediately cleaned out the ear, which had not ceased discharging, and thoroughly inflated with air'bag. that day there was not another drop of discharge from the ear. After a few days' treatment the case was dismissed, and in due time I presented my bill for \$25 for the operation, and additional for the subsequent office treatment. Promptly I received a check for the amount with profuse thanks for the results and moderate size of my fee. Also



in due time I received the following from the aforesaid physician: "My Dear Doctor ——:

"You were to see me further concerning the matter under discussion (making out my bill and handing to him for collection). The fact is I had worked up that case and expected to operate it myself. When I send you cases for fitting (with glasses), etc., you can have all the proceeds, but in this case I shall, under the circumstances, expect a division of the proceeds, and, furthermore, a careful observation of the limits of your specialty henceforth when caring for my patients.

"Yours truly,

"Signed, ——.

### EXPERIENCE NO. 5.

The last clause of the letter just quoted has reference to the case I am now to relate. On the return to our offices from the adenoid case, and after the conversation related, the doctor said to me, "By the way, you are treating Mr. Blank for general syphilis, aren't you?" I replied that I was. "Are you not getting out of your specialty?" was his rejoinder. To which I replied, that if he would or could tell me how I could successfully treat a syphilitic pharyngitis involving the Eustachian tubes and middle ear without treating such a case constitutionally I should be very glad to be advised. And if that was the limits he placed on the field of a specialist, then there was absolutely no room for an exclusive specialist. The doctor insisted that I should have sent this patient back to him for treatment. The truth is this same physician treated the patient during the primary stage for the chancre on the foreskin, and did not tell him what it was or give him any precaution against infecting his wife, and even when the case applied to me for the involvement of his throat and ears in second stage, and from whom I learned the above fact, I asked the doctor if there was anything in the nature of the case while he was treating him to suggest syphilis, and was assured there was not. The patient did not come to me at the suggestion of the doctor, but came because he knew me as a specialist along the lines he desired treatment, and it was only by close questioning and observation that the correct diagnosis was made and proper treatment given. During the first week I treated the patient the loss of hair began and the cutaneous eruption appeared, and the patient informed of the true nature of his trouble.

I am glad that these experiences are not the rule, but they are too

#### 274 RELATION OF GENERAL PRACTITIONER TO SPECIALIST.

frequent to be considered the exceptions that prove a rule. If they were confined to me, personally, or, if they were furnished only by one or two of my confreres, I could think the fault was mine. But the fact that they are more or less common experiences with all physicians doing special work has led me to thus frankly relate them, hoping that a better understanding may be had.

I may have a wrong conception of the relations that should exist between the specialist and the general practitioner, but I have been both, having had seven years of active general practice before limiting my work to what I regard as the proper field of a specialist, and I have tried to look at the matter from both points of view. I do not wish to be understood as placing any limit on what a general practitioner shall or shall not do, for I hold that any physician doing general practice has a right, and, in fact, should do for his patients all that he feels himself competent to do, and I freely admit that the average general practitioner of to-day is much broader and more versatile than he was a decade ago. But what I do object to is that the general practitioner shall deny me the right to go to the bottom and determine the underlying cause of a condition which manifests itself in my special line of work, and say that I should then send the patient to him to be treated. I demand of the oculist that he shall not only correctly diagnose a case of specific iritis, but that he shall know and apply the proper treatment, and who will say that the proper treatment is not constitutional as well as local. I demand of the otologist a sufficient knowledge of general medicine to correctly diagnose conditions of the ear, and to know and apply the proper treatment for those conditions without sending him back to his family physician. So we might go on through all the different lines of special work, and this rule, if it be admitted as a rule, holds good.

One more thought suggested by the doctor's note from which I have already quoted, and I have done. That is the division of fees. On this subject I have found a much wider divergence of views than upon the limits of the field of the specialist. My own views are briefly this: Under certain conditions I consider it not only proper but eminently fair to divide fees, but I have had physicians indignantly resent the suggestion where I thought it proper to suggest the matter. And on the other hand, I have had many physicians demand a division, where I could by no view of the matter see why they should. I have had physicians say to patients seeking the services of an oculist, "I will arrange that with Dr. Woodburn; he will do the work cheaper for me

than he will for you," and then demand a division of the fee after making a plea for consideration on behalf of the patient.

When I am called into the country to do any operation where the after treatment and care of the patient is left in charge of the attending physician, and where such care and after treatment is quite as responsible for the successful outcome as the operation itself, and where the circumstances of the patient will justify, while the attending physician can only charge so much per visit without regard to the responsibility he must assume, I consider it only proper to make sufficient charge to divide with the attending physician, not upon any definite percentage basis, but according to the equities of the individual case, and I do not consider it any injustice to the patient in doing so.

I want to hear from the experience of others. April 20, 1906.

Variation in Absorption by the Stomach. In the April number of the American Journal of Clinical Medicine, Professor Salisbury contributes a suggestive paper, dealing with the assumption that absorption from the stomach is universal and speedy. In dogs and probably in man iodides are not so absorbed; strychnine is not absorbed from the stomach of the rabbit, but is from that of the dog and probably from that of main. Inouve found that neither atropin nor rhubarb was absorbed from the human stomach. Inorganic salts are slightly, if at all, taken up from this organ. Altogether, the uncertainty of this organ is great. The intestines offer more favorable conditions; and if the stomach is empty when the medicine is taken, and the motor power is good, the dose may be forwarded into the duodenum and be absorbed thence in about a quarter of an hour; but if food is present, it must wait the conclusion of digestion. Alcohol facilitates absorption. Great dilution hinders quick action. Carbohydrates leave the stomach more quickly than peptones—syrup is a better vehicle than milk when speedy action is desirable. Iodides are decomposed by hydrochloric acid present in the digestive period, unless alkalies are given at the same time.

A Reconciling Truth is always a higher truth. No principle or law of nature or of life can be understood until we can look down upon it from a higher truth.

Nature Itself is full of apparent contradictions, from the point of view of the senses. But when we rise above the senses and regard the operations of nature from true science, all discords and apparent contradictions disappear.

#### A PERPLEXED SPECIALIST.

THOMAS M. STEWART, M. D.,

YOUNG woman presented herself for treatment last summer, complaining of some deafness and noises in the head. She explained that several physicians and two specialists had given her treatment for the trouble, and in each instance she simply quit because she received no benefit and no encouragement that the treatment would eventually relieve the symptoms.

She was a music teacher, and her occupation really prompted her to try again. She was delicate in appearance, under weight, and manifestly nervous. When she was informed that her general condition must first be changed, that treatment directed to building up her bodily strength must be the first step, and that her family physician was the first link in this chain, she demurred.

The patient explained further that she was afraid to go out alone, fearing that she would throw herself in front of any rapidly moving vehicle, and that she felt almost constantly impelled, as if being pushed, toward any cutting instrument. The constant demand upon her will power was beginning to tell upon her, and she complained that physicians either ignored her appeal for help, called it all imagination, tried to laugh and joke away her fear; or they gave her medicines that upset the stomach, caused skin eruptions and did no good. She refused to be directed to physicians whom I recommended, and would not accept my offer to go with her to their office, and thus guarantee that serious consideration would be given her every symptom. Her quiet reply was: "I shall not again put myself in the way of being looked upon as insane, hysterical or foolish. I am not any of these; but I am in great trouble, and feel that I must be helped soon or become a raving maniac." Thus perplexity entered into the combination at more than one point.

The patient applied for ear treatment; she seemed to need general dietetic and hygienic treatment; but the fundamental trouble revealed itself to be of a nervous nature. My duty to the general physician was to refuse to handle the case as being not in my line; my duty to the patient was to help her all I could, because I felt the case was not beyond

a cure. Therefore, I told the patient that I thought she could be very greatly benefited and put on the road to mental and physical health.

I first directed her to take a daily, cool sponge bath and a brisk rub. which she had already been doing for some time. A diet of fresh fruits, vegetables, cereals, nuts, beans, eggs and peas in place of meat, and plenty of water between meals was ordered.

Internally aconite was first prescribed, followed by aurum, cimicifuga and, later, sepia.

The patient made little progress, the dietetic and other general directions were helping the physical side of the trouble, but the mental side continued unchanged for weeks, during which time I studied the patient, and was led to conclude that her intellectual attitude of mind demanded some explanation of what I thought about her case; why she was so afflicted, and becomes former peace of mind.

It was a perplexing problem to solve and instead of trying to puzzle out all the questions that came before my finnd, I said to her one day:
"What do you consider your said self? Your mind, your body, your

life. your soul-or what?"

She answered, "It must be soul or spirit." "But what do you thin yourself?"

We finally came to the conclusion that when we say "I am" we mean our very real self, and that soul, spirit, etc., are aspects of or names applied to this central being. We further concluded that consciousness is the fundamental endowment of our real self. The patient easily grasped these points, as they are really self-evident, and I sent her away with instructions, regarding the will power as supreme in the control of all our faculties and capabilities.

While for seven years she had been combating her abnormal mental condition, and as she thought expending her will power to good advantage, some instruction seemed necessary in order that she could get better results and relieve the nervous tension with even less effort than had seemed necessary.

Instead of fighting the thing all the time, and so keeping it ever before her, I asked her to consider all her impulses and thoughts toward self-destruction as just so many unwelcome visitors. Just as she might be courteous to unwelcome callers at her house, and would not press upon them an invitation to soon come again, so should she create an attitude of mind toward these bad impulses. As her will and good sense would guide her rightly with regard to her unwelcome visitors, so also the will and her good sense would aid in gaining mastery over the too easily influenced mind.

I think I have gone enough into details to show the drift of the "office talks" about this case. It is all quite plain when once the thing is started, and when the patient catches on to the fact that directions to manage mind and soul are just as capable of being understood as directions regarding what to eat and why, or as to the need of exercise and the kind of exercise their particular case requires.

Since last summer the improvement has slowly progressed, so that ear treatments have been productive of encouraging results; the patient is again teaching music, and has the confidence in herself so necessary to normal individuals.

Some of the perplexities in the case as to what instruction to impart to the patient were solved by her own inquiries; the main idea was to instill into her mind the fact that she had it in her own power to break the bonds that enthralled her; and while the recital of the matter seems simple and commonplace, yet other cases of a similar nature make it quite apparent that we physicians need to gather more knowledge regarding the same, and the inspiration to take hold with the patient to work the cure.

I am well aware that this paper opens up the subject of hypnotism. faith cure, suggestion, mental science, etc., in the cure of diseases, and that the materia medicist, pure and simple, will think the indicated remedy quite powerful enough to do equally satisfactory work.

In conclusion, I may say that I do not think it is right for me to use the hypnotic processes in the cure of disease, because any process that deprives the intelligence of man of any of its rights, powers or possibilities, is contrary to what I would permit to be done to me. Therefore, it is not right, and in this my reason and conscience are involved.

Some confusion exists whenever the word "suggestion" is used, I mean "independent suggestion," unless I specifically state "hypnotic suggestion." Independent suggestion is a suggestion made by one person to another, while both are in full and complete control of their own voluntary powers and rational faculties. That is while neither is under hypnotic control; each acts independently, and of his own free will and accord.

Hypnotism is the process by and through which a hypnotist holds and exercises control of the will, voluntary powers, and sensory organism

of his subject; and "hypnotic suggestion" (?) is a so-called suggestion made by a hypnotist to his subject while the latter is under the hypnotic control of the former; it is not suggestion, it is an imperative command.

To any who may have more than a passing interest in the matter here-in mentioned, it will add to their exact knowledge by giving a careful reading and then study of a book, viz., "The Great Psychological Crime," published by the Indo-American Book Co., 19 N. Kedzie avenue, Chicago, Ill. Other sources of information might be suggested; but one book, having on its every page evidence of careful and honest thought, is worth considerable in these days of "money talks." The reader might not agree with me nor the author of the book mentioned, but that is no calamity; the point is, we need independent and rational thinking on many things in medicine, those books that make one think are helpful in proportion as we do intellectual work to harmonize our views with further light, or to combat in order that a rearrangement of things may give us more light.

Traction Building.

The Modern Conception of Matter. William Dodge Horne reviews the considerations that have led up to the modern conception that matter is composed of positive and negative electricity, and nothing else. All of its properties, the newly discovered as well as the long known, can thus be explained, except gravitation; and even this is surmised by Sir Oliver Lodge to be a slight but uniform residual or secondary effect, due to the immersion of negative electrons in a positive atmosphere. It is a mutual force acting between one atomic system and another, which is proportional to the number of electrons in each. Sir Oliver Lodge describes the atom of matter as constituted of an individualized mass of positive electricity, diffused uniformly over a space the size of the atom, perhaps spherical in shape and about one two-hundred millionth of an inch in diameter. Throughout this small spherical space some 800 minute particles of negative electricity, all exactly alike, are supposed to be scattered, flying vigorously about, each repelling every other and yet contained within their orbits by the mass of positive electricity. The positive electricity is very much attenuated and constitutes, perhaps, only about I per cent. of the mass of the atom, while the negative electrons are correspondingly dense, and so inconceivably small that the 800 are less crowded in their atom than are the planets in the solar system. Atoms of different kinds of matter are supposed to be constructed in the same general manner and of the same kind of electrons, but the number of electrons in an atom is proportional to the atomic weight of the element.—Medical Record.

#### AN OZÆNA REPERTORY.\*

#### HOBART J. W. BARLEE, M. D.,

### Paris. France.

Weak smell or entire loss: Alumina, Aur. met., Calc. carb., Graph., Kali bich., Sang., Sepia.

Increased power of smell: Sang., Con.

Excessively ocute smell with purulent discharge: Con.

Fetid smell before nose:. Sepia.

Putrid smell when blowing mose, recognized by the patient, although olfaction is impaired: Aurum met.

Unbearable odor: Ars., Asa. Aur. met., Aur. mur., Calc. fluor., Elaps, Graph., Nit. ac., Sep., Ther., Thuj.

Smell like putrid herring pickle:. Elaps.

Smell worse during menses: Graph.

Smell of animals in back part of nose: Con.

Septum swollen, red, sore to touch: Alumen, Con. (stitching pains), Hydrast.. Merc. iod. flav.

Perforation of septum: Aur. mur., Kali bich. (ulcers.)

Perspiration of septum: Merc. cor.

Discharge sanious: Alumen, Calc. carb., Con., Hydrast., Kali carb., Merc. iod. rub.

Discharge thick, yellow: Alumina, Aur. met., Graph., Merc. iod. rub., Nit. ac.

Discharge like glue: Merc. cor.

Discharge greenish, yellow: Calc. fluor., Kali iod., Nat. carb.

Discharge yellow, red: Calc. carb.

Discharge orange yellow: Lycopod.

Discharge greenish: Asa. Kali carb., Puls.

Discharge acrid, watery, cool: Kali iod.

Discharge making lips sore: Calc. carb., Mag. mur.

Scabs in nose: Alumina, Ars., Aur. mur., Carb. an., Graph., Kali

<sup>\*</sup>Written expressly for this JOURNAL.

bich., Lach., Nit. ac., Petr., Sepia, Silic., Thuja.

Painful scabs: Thuja.

Bleeding surface under scabs: Alumina.

Nose sunken in: Aur. met.

Caries of bones: Asa, Aur. met., Aur. mur., Merc. iod. rub., Ther.

Caries with feeling as if nose would burst: Asa.

Caries into cheek bones with ear trouble: Aur. mur.

Osseous growths in nose: Calc. fluor.

Little boils in nose with burning sensation, < during menses: Carb. an.

Saddle across nose with copper colored eruption: Carb. an.

Epistaxis: Calc. carb., Elaps, Kali carb., Sang.

Epistaxis frequent and profuse, almost to fainting: Calc. carb.

Epistaxis when the nose is violently blown: Elaps.

Ulceration in nose: Alumen, Ars., Asa. Aur. met., Aur. mur., Bals. Peruv., Hydrast., Iod., Kali bich., Nit. ac., Sang., Sil., Thuja.

Ulceration in nostrils: Ars., Aur. mur., Carbo an., Graph., Mag. mur., Phos.

Nostrils sore and crusty: Alumina, Ars., Graph., Hydr., Iod., Kali carb., Lach., Lac. can., Merc. cor., Petr., Thuja.

Nose swollen, red: Alumina, Calc. carb., Carb. an., Iod., Kali iod., Phos.

Red tip, skin peels off: Nat. carb.

Eruption of nose: Asa. Carb. an., Sepia, Thuja.

Dryness of hostrils: Aur. mur., Graph., Kali bich., Phos., Sil.

Discharge from post. nares: Elaps., Hydrast., Kali bich., Merc. cor., Merc. iod. flav., Merc. iod. rub., Nit. ac., Pet., Ther.

Nose stopped up and runs at same time: Merc. cor.

Pain: Asa, Aur. met., Carbo an., Con., Elaps, Iod., Kali bich., Kali iod., Merc. iod. flav., Nit. ac., Ther.

Tearing pains from within out: Asa., < at night.

Burning pains: Aur. met., Carb. an. (during menses), Con.

Pain from root of nose to ears when swallowing: Elaps.

Pain in septum, stitching: Con. (sharp), Merc. iod. flav.

Pain in frontal sinus: Kali bich., Kali iod. (burning and throbbing), Nux v. (dull), Ther.

Pain as from splinters in nose: Nit. acid.

Pain, throbbing, in forehead extending to occip.: Ther.

Migraine: Sang.

Bony destruction in ear with obstinate otorrhæa: Aur. met.

Purulent otorrhæa, smelling like putrid meat: Ther.

Oozing behind ears: Graph.

Itching behind ears, she would like to scratch them off: Ther.

Itching of tip of nose: Sil.

Cold nose: Sil.

3 Rue Washington, Champs Elysees.

#### SECOND INSTITUTE APPEAL FOR SAN FRANCISCO.

To the Homæopathic Profession of America:

On the second day of the great San Francisco disaster, President Green, of the American Institute of Homocopathy, wired me asking me to solicit funds for the relief of our stricken brothers in San Francisco and California who were the victims of the now historic disaster. In response to President's Green's request, I immediately appealed to the homocopathic profession through the several State Societies and the Associated Press, and have received to date through that appeal \$3.325. Knowing that a local committee could best distribute the fund thus collected, I immediately appointed as such committee Drs. James W. Ward, Wm. Boericke and C. N. Chamberlain. Of the amount collected, \$1,638.50 came through the Homocopathic Medical Society of Philadelphia. I understand that other moneys have been sent directly to Dr. Ward, which did not pass through my hands.

Dr. Ward writes me that the San Francisco College and Hospital will have to be reconstructed and refurnished, and that there is great need of books, instruments, remedies, etc. Nearly all of the transportation companies will carry supplies thus donated to Dr. Ward free of charge.

While the profession has responded liberally, I think that more money ought to be raised. If 10,000 homocopathic physicians in the United States would average \$5 each, a great good could be accomplished. I therefore make a second appeal through the homocopathic journals in behalf of our unfortunate, but ever plucky, brethren in California. Donations can be sent directly to me or to Dr. Ward, 2401 Scott street, San Francisco, California. In either event a receipt of acknowledgment will be at once forwarded to the donor and a full report made to the American Institute of Homocopathy at its coming meeting.

James C. Wood, 816 Rose Building, Cleveland, Ohio.

#### CHRONIC AURAL CATARRH.\*

#### WILLIAM A. PHILLIPS, M. D.,

## Cleveland, O.

HE skill of practitioners of all schools of medicine has been sorely put to it to devise successful measures for the cure of catarrhal affections of the ear. As yet entirely satisfactory results have not been reached.

Local treatment, constitutional treatment, and surgical treatment have each figured in the battle for supremacy, and have also sometimes all joined forces in the fond hope that in union there would be sufficient strength to vanquish the disease foot and horse. Gratifying results have, indeed, many times been attained, but it must be candidly confessed that the great majority of cases have been alleviated only rather than perfectly cured.

In varying degrees of development from childhood to age there arprogressively and generally three well-marked stages of aural inflammation, namely, 1. The catarrhal. 2. The hypertrophic, and 3. The hyperplastic.

The catarrhal, the distinctly moist variety of the trouble, has its type well shown in the attacks visited upon children. The mucous lining of the nostrils, throat, Eustachian tubes and tympanic cavity, becomes in turn hyperæmic, congested, inflammatory. The mucous tissue is swollen, the secretory glands are abnormally active, the tympanic cavity is more or less completely filled with a serous exudation or with mucus, or with both, which, together with thickening of the membranes, especially around the foot of the stapes, contribute all together to interfere with the vibrations necessary to produce hearing. This state of the tissues implicated is maintained by repeated colds until the condition reaches the chronic stage. Beyond this for several years even there may be no very perceptible change. The hearing will be better and worse according to the amount of exudation and swelling; there

<sup>\*</sup>Prepared for the Homocopathic Society of the State of Ohio.

will likely co-exist a full, stuffy feeling in the ears, twinges of pain, and a sensation of ringing.

Cases which have not progressed beyond this point are for the most part curable. All this, however, is not peculiar to children. Adults by repeated colds may experience the same train of symptoms, eventually arriving at the distinctly chronic condition indicated above. In the adult, however, the catarrhal or moist stage is likely sooner or later to be superceded by the hypertrophic stage, and later by the hyperplastic.

It is during the first stage of the trouble that the disease is the most interesting to the general physician and also to the aurist, because it is during this time that the symptoms are the most amenable to treatment.

One particular feature of cases of this sort is of importance to recollect and that is the wrong impression which the patient himself, if not his physician also, entertains concerning the real nature of the trouble. It is not generally known that normally people possess more hearing power than they need in order to hear conversation, music, public speaking and the like; accordingly one may lose fully one-third of his hearing power as tested with a watch before he is aware that he has lost any at all. The result is that a catarrhal trouble may have existed for months and even years of the degree indicated without a realizing sense of the true condition. Assuming now that a case of this kind presents with a previous but unnoticed impairment of hearing, but one that has been increased by a recent cold, and what wonder that the patient believes this to be the first instance of deafness on his part? Cases of this kind are numerous, and explain by their very peculiarity in this direction why it is that apparently recent cases are often so stubborn as regards success in treatment.

It is in cases of this kind that the most valuable time is lost. They either have no treatment at all, or at most very little, and by repeated colds the trouble is better and worse, better and worse, but all the time a little worse, until the hypertrophic stage is reached.

At this point we find the case frequently complicated with stenosis of one or both nostrils, with polypi, with deviations of the nasal septum, with adenoids, with hypertrophied turbinates, with enlarged faucial tonsils, and it must also be said, with an unfavorable prognosis. This stage which is likely to be aggravated sooner or later by the onset of the hyperplastic, will then have an atrophic state of the middle ear added to its other troubles. At this time the sclerosed condition of the tissues around the foot of the stapes retards the sonorous vibrations, and by

contraction produces a degree of pressure which often makes the tinnitus a symptom harder to endure than the deafness itself.

Treatment.—The subject of treatment is one of great significance in view of the fact that the greater part of the United States as regards population is notably a catarrhal region; and what is more, it is estimated that more than fifty per cent. of those who reside in this region who have reached middle age suffer some degree of imperfect hearing in consequence of catarrh. Without splitting hairs, from north to northwest side respecting the exact stage of the trouble, it may in general be said that in cases which have existed for several years and the watch cannot be heard more than two or three inches from the ear, treatment will prove of little avail provided the patient remain in the same location where the impairment was contracted.

Unless the hyperplastic stage has put in an appearance, a radical change of climate will sometimes accomplish the most gratifying improvement even in cases where constitutional and local measures have failed to establish relief.

In the case of children, and also in the case of comparatively young people who have reached adult age, the outlook for successful treatment is to a degree encouraging. At this time great improvement and frequently perfect restoration of the hearing may be brought about by careful and persistent treatment, which means, incidentally, that the hyperpastic, or, perhaps, even the hypertrophic stage, has not yet exercised the high privilege of squatter sovereignty. In children adenoid growths often complicate matters by directly and indirectly increasing the deafness, and when this is the case the growths should be promptly removed.

Local applications best made in the form of a spray do good service, and should be used continuously two or three times daily. For a purely cleansing application nothing is better than a spray of warm common salt and water in the strength of a teaspoonful of salt to a pint of water.

The palliative applications most in use are Dobell's solution, glycothymoline, Seiler's tablets, and a combination of menthol and albolene. The latter is perhaps as effective as any of these remedies, and is specially to be recommended during the cold weather. Calendula borate used in powder or solution is also a good remedy.

The internal remedies which seem the best suited to give relief are the several forms of potash and of mercurius, belladonna. arsenicum, ambrosia, euphrasia, and gelsemium. This line of treatment, local and constitutional, aided by the occasional use of the air-bag, is the most satisfactory when applied to patients below adult age, but is also of service in a'l cases before the appearance of the complications that come with the hypertrophic stage. When these complications occur, the same remedies should be continued, but added to these measures surgical treatment for the removal of en'argements and certain other defects is quite in order.

The hyperplastic stage, the stage of atrophy, of dryness and contraction, brings about structural changes that defy the knife, the sprays, the internal remedies, and even a change of climate. Only the merest palliative results can be obtained by any or all of these remedial forces.

Total deafness, however, does not result from any of these stages of the trouble unless the internal ear is invaded by an extension of the inflammation through the oval and round windows. If this occurs the hearing may be and commonly is entirely lost.

723 Schofield Building

When there is bleeding from the tongue, post-operative or otherwise, and one feels reasonably sure that the hemorrhage is arterial, it can, as a rule, be easily arrested by passing the forefinger down to the epiglottis and hyoid bone and drawing the base of the tongue upward toward the chin.—Am. Jour. of Surg.

Wet Dressings, especially the very useful Burow's solution of aluminum acetate, when applied to the hand or foot, usually cause maceration and whitening of the skin, which is apt to alarm the patient. The addition to the solution of one-fourth its bulk of glycerin or alcohol, will obviate this unsightly maceration.—Am. Jour. of Surg.

Touches a Cable Carrying 22,000 Volts and Lives. This case is reported in the Dominion Medical Monthly. A burn, 4x6 inches corresponding to the part of the wet arm that came in contact with the live wire; there were also deep burns on the forearm, a slight one on the abdomen, the sole of the foot was blistered, and the base of the great toe burned to the bone. It is found in such cases that following the burns, the muscles frequently degenerate and slough, even up to their insertions. The best treatment for the burns is a dry antiseptic dressing from the beginning. A tendency to hæmorrhage should be expected during the separation of the sloughs. Healing is slow owing to the depth of the burn and the lowered vitality of the tissues. In this case the burns were more than two months in healing, although the sloughs were removed surgically and skin grafting was employed

### PRACTICAL HINTS.

Conducted by G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

W. F. Wesselhæft sterilizes catgut by placing the separate strands in a small envelope which is enclosed in a larger one. The envelopes are sealed and packed in a small brass case which is filled to a definite point with alcohol, and is closed hermetically with screw-bolts. The case is then immersed in boiling water for an hour. This raises the temperature of the contents to 212°, and develops a pressure of twenty-five pounds to the square inch, thus insuring thorough impregnation of the catgut with the alcohol. The envelopes dry in a short time on removal from the alcohol. The advantages of the method are that it is simple and inexpensive to carry out, while both practical experience and the author's culture-experiments prove that absolute sterility is obtained. Fractional sterilization is illusory in dealing with catgut.

Acute Primary Laryngeal Edema. Harmon Smith applies cold compresses to the throat and even leeches. Internally, a brisk purgative, or even emesis, he says, will abstract some of the accumulating serum. Pellets of ice, steam with benzoin added, adrenalin by spray to larynx, and ten drops of the same solution every hour internally, are very important therapeutical agents. "Venesection is of considerable value;" scarification or puncture is of unquestionable value whenever it can be accomplished. The hypodermic injection of one-quarter grain of pilocarpine or iodine locally after cocainization has been advised. Tracheotomy is the one most effective measure.

Primrose's New Operation for Pannus consists in causing an extravasation of blood into the subconjunctival tissue around the cornea. This, by its mechanical pressure and by acting as an irritant foreign body setting up a localized inflammation, causes the obliteration of the vessels which vascularize the cornea. The only instrument required is a small, sharp-pointed knife—a Beer's cataract knife does very well for the purpose. The point of the knife is passed through the conjunctiva at a distance of two or three millimeters from the cornea and made to puncture one of the larger blood vessels. The knife is then withdrawn. The conjunctival wound should be as small as possible, and made obliquely by holding the knife at an acute angle with that part of the surface of the eyeball which is being operated on. In this way there is no external hæmorrhage, but bleeding takes place into the subconjunctival tissues and is arrested automatically by the pressure of the extravasated blood on the blood vessel walls. In like manner, many of the

smaller vessels in the vicinity are mechanically closed. The mechanical action is increased by the formation of a coagulum, the fibrinous part of which shrinks and makes the whole mass smaller. By the time the blood clot has disappeared, the blood vessels in the cornea affected by the operation have shriveled up and the cornea has regained much of its transparency. The whole pannus may be treated in this way at one time, or the operation may be repeated from time to time, only a part of the pannus being treated each time. The latter is always advisable when the pannus is marked, as the inflammatory reaction is sometimes very severe and accompanied by a good deal of pain. Although the structures in the anterior part of the eyeball are all more or less affected by the inflammation, this is easily controlled and subsides in a few days with the application of suitable remedies.

Middle Ear Suppuration. Some otologists favor Bier's treatment by hyperæmia in cases of acute suppurative otitis media, as well as in cases of acute mastoiditis, while others absolutely condemn it. Dr. Stenger reports the results he himself obtained in eighteen cases of acute suppurative conditions. He employed two methods of producing the congestion—first, by means of a rubber neck bandage, and secondly, by use of suction cups. In suppurative otitis media "the treatment with the rubber bandage may be commenced as soon as the diminution in the severity of the symptoms has begun under the influence of the ordinary treatment," as recovery may be hastened by the congestion treatment under these conditions. If alarming symptoms develop from the start, the congestive treatment should be employed at once in addition to the usual measures, without however unduly deferring operative intervention, should this seem necessary. In cases with involvement of the mastoid he makes an incision and evacuates any pus that may be under the periosteum and chisels a narrow passage to the antrum; a suction cup is then applied to the wound and allowed to remain for several hours. Large amounts of secretion are usually obtained, and the procedure is repeated for shorter periods of time on succeeding days. In cases without abscess, but in which there is swelling over the mastoid, with tenderness to pressure, a small skin incision is made and an opening effected in the bone, though this need not penetrate the antrum. By the application of the suction cup the mastoid cells can be effectively drained of any secretion present.

Ocular Injuries. Injuries of the eyelids and other ocular appendages seldom affect vision, infection rarely follows, wounds heal rapidly, and they are to be treated simply in accordance with the ordinary rules of surgery. This treatment may be carried out by any intelligent practitioner.

Superficial injuries of the cornea are more mportant. Infection frequently takes place, and then there is danger of a suppurative process, which may extend throughout the cornea, or even involve the who'e

eyeball. Remove foreign bodies, and use applications to prevent infection.

Penetrating wounds of the eyeball should always be approached with more or less concern. If not already infected at the time of the injury, they easily become infected afterward. Moreover, a foreign body may have been driven into the eye, and not only carries infection with it but itself becomes, with rare exceptions, a certain cause of destructive inflammation.

In every punctured wound of the eyeball by a small, unseen object, there should always be a suspicion of the introduction of a foreign body. The diagnosis is often most difficult, and requires special appliances and experience. The removal of a foreign body from the interior of the eye is almost imperative to its salvation. Here, too, special equipment and special skill are demanded.

Infection, by whatever means it may be introduced, is the agent which destroys the injured eye, both by suppuration and by non-suppurative uveitis. In non-suppurative traumatic uveitis the infection seems to be of a specific kind and is transmissible to the uninjured eye, producing there a sympathetic uveitis, which is also destructive in its course.

Sympathetic inflammation does not develop until at least two weeks after the injury of the first eye. In the absence of a foreign body, or after its removal, the immediate treatment of a perforating wound consists in sterilizing the eye and its surroundings, freeing the wound of all incarcerated tissues, and closing it as perfectly as possible, or touching the opening with pure carbolic acid. Subsequently, sterilization should be kept up as effectually as the circumstances will permit.

Infection should be combatted by intraocular disinfectants, and rendered dormant by the persistent and methodical application of cold over the eye. An eye that is hopelessly lost at the time of the injury should at once be excised. When an eye is affected with active traumatic uveitis, it should be enucleated within two weeks from the time of the injury, unless the eye has or may be given useful vision.

In wounds of the eyeball of all varieties, delay is dangerous, and if there is the slightest possibility of a foreign body being lodged within the eye, or if infective processes begin, the dangers to sight are so great that the services of a specialist should always be secured, if possible.—A. A. Hubbell.

Adrenalin in Ozena. In three cases, adrenalin, to secure contraction of the mucous membrane in order to examine the sinuses, caused an exacerbation of the malady. Royet thinks that this was directly due to the action of the adrenalin for three reasons: (1) There is a great similarity between the appearance of a nasal mucosa well retracted by adrenalin and that seen in ozena. Adrenalin often causes an abnormal secretion. (2) The atrophy of ozena, especially in early cases, is more apparent than real. In periods of least activity of symptoms, or after

treatment, the signs of atrophy are often very sensibly diminished. (3) In states of grave intoxication, especially in tuberculosis, the nasal

mucosa may appear atrophic.

Since a vasoconstrictor had an unfavorable influence, Royet determined to seek benefit from the local use of vaso dilators. He found in three cases of ozena great palliation resulted from the use of stovain and dionin. In the first case, the patient had been obliged for six months to use a nasal douche of boric lotion twice daily, on account of the abundant fetid secretion. After a few days of treatment by means of a daily spray of a I per cent. solution of stovain in glycerine and water, he was able to diminish the number of injections to one a fortnight. The fetid smell disappeared, and the good result had already been maintained for more than a year. In the second case, the injections, which had been necessary twice a week, were only needed once a fortnight after a short use of stovain, and later of dionin. The third patient, who had been obliged to douche once every five or six days, was able to discard treatment for two months after the use of stovain, but a nasal cararrh caused the crusts to form again.

Superficial Retraction after Operation for Elongation of the Uvula. To relieve the hacking cough and frequent swallowing amputation was performed in the usual way, with the cut slanting backwards and upwards. Slight hæmorrhage followed. About twenty minutes later it was found that the mucous membrane and sub-mucous tissue had receded nearly to the soft palate leaving the uvula almost inside out. The tissues were replaced and held a few minutes by a pair of finetoothed forceps without effect. It was finally decided to stitch the retracted tissues over the end of the stump, which was accomplished with considerable difficulty on account of the gagging and irritable condition of the patient. The case is interesting on account of its freakish performance, as nowhere can I find record of a similar occurrence. I am aware of the fact that undue traction on the mucous membrane while holding before amputation might cause something similar, but in this case no traction was used at all. The result was a perfectly healed stump and a cure of the distressing symptoms.—L. D. Shipman.

#### SOCIETIES.

#### INTERNATIONAL HOMŒOPATHIC CONGRESS.

Boston, Mass., July 11, 1906.

It is the wish of the "Committee on the International Homocopathic Congress" that there be held an educational exhibit which shall demonstrate something of the work that homeopathy is doing along various lines in different parts of the world. With this object in view, the cooperation of all homocopathic institutions, societies and individuals is invited. There will be provided at Atlantic City, September 10-15, 1906. a large hall in which this exhibit will be held. It will consist of specimens, photographs, charts, drawings, plans of new buildings, illustrations of unusual cases, and demonstrations of work performed. ready more than twenty institutions have signified their intention of participating. The exhibit will be an enlargement of those given in former years by the individual colleges located in Boston, Philadelphia, Cleveland, and Chicago. It is hoped that all to whose attention this notice may come will endeavor to do what they can to demonstrate the present status of homocopathy and its accomplishments in the allied branches of medicine.

Further information can be obtained by writing to the secretary of the committee, Dr. J. P. Sutherland, 302 Beacon street, Boston. or to Dr. W. H. Watters, 80 East Concord street, Boston.

At the coming meeting of the O., O. and L. Society there is to be presented a paper on "Radium in Affections of the Optic Nerve." Anyone who has made any use of this treatment will confer a favor by sending his name to Dr. David W. Wells, Secretary, The Westminster, Copley Square, Boston.

#### BOOK REVIEWS.

Pocket Manual of Homogopathic Materia Medica. Third edition. By William Boericke, M. D. Revised and enlarged, with the addition of a Repertory, by Oscar E. Boericke, M. D. New York:

Boericke & Runyon, 1906. 1049 pages. Price, \$3.50.

This edition of this admirable book has been thoroughly revised, all new remedies introduced since the second edition have been added, and the author has availed himself of all verifications published since the appearance of the last edition. He follows Hering in using nosological terms in the symptomatology "not for the purpose of recommending the particular remedy for that disease, but to show the great variety of remedies that can be used for any one form of disease when otherwise indicated," as an aid in finding the curative drug.

Literally, the book (11/8" thick) goes easily into the pocket, and, what is of more importance, is readily extracted; if really is a "pocket book" containing a marvelous amount of matter between its covers, and fits

the hand snugly.

Under each remedy the characteristic symptoms, arranged according to the Hahnemannian schema, are preceded by a paragraph giving the general indications for the drug with its sphere of action and are fol-

lowed by its modalities, relationship and dose.

We find indications for such unusual remedies as formalin, adrenalin, ammon. phos., the picrates of ammonium, lime and iron, guarana, Hecla lava, lapis albus, iththyol. cocain, iodoform, naphthalin, juglans. lemna minor. oxytropis, phaseolus, spiritus quercus glandium. vanadium, and

xerophyllum. These will repay perusal.

For the scientific standing of our school we are sorry to see place given (here and in Blackwood's book) to Calcarea Renalis. Here, because we are not informed whether the phosphatic or the uric calculus "is reported" to cure (the author evidently forgot that he was giving us "verifications"), and in the other recent publication, because Prof. Blackwood says that "both are used."

The Repertory occupies 353 pages, of which 13 are devoted to the eyes, 5 to the ears, 8 to the nose, and 7 to the throat. The Index, 13 double column pages, is unusually complete, as it lists 1061 remedies.





# The Ibomæopathic

# Eye, Ear and Throat Journal.

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Lancaster, Pa., and New York, Sept., 1906.

No. 9.

#### EDITORIAL.

THE RECTIFIED COIL CURRENT.

If the hopes of the enthusiasts are justified we may be entering a new era in radiotherapy. The French valve tube has been modified, and experiments tend to show that by introducing two of the latest valve tube rectifiers into the circuit the reverse current of the induction coil is practically eliminated, even with the very heavy currents (twenty amperes) and enormous voltage which are sometimes used. The Geisler tube at the negative end becomes intensely blue and filled with blue luminous rays, while the positive shows no halo nor other manifestation of any current—only one bright red point at the very end of the terminal. The back of the X-ray tube is almost black, while in front of the target there is a very bright, rich green color with a sharp line of demarcation.

By changing the induction to the various tappings, the amperage being unchanged, all degrees of variation can be produced in the tube. Any degree of brilliancy of penetration can also be had by simply increasing or decreasing the amperage in the primary. "The current can be crowded until the tube appears as if it were at the bursting point with its brilliancy." The bones of the hand can be distinctly seen twenty feet from the target; with another induction the same amperage would make them as transparent as the flesh.

Will this discovery render the coil as safe as the static machine, so far as the danger of burning is concerned? Is the latter safer because its current is unidirectional? Or because it is of a low amperage? The new application will go far in the settlement of this problem.

At present it would seem as if both the amperage and the reverse current are factors in the X-ray burn. Dr. Albert C. Geyser, of Cornell University Medical College, has "found that burns have become practically a thing of the past" since using the rectified coil current, despite the fact that he now treats "all skin lesions for local X-ray effect only by applying the tube as close as possible to the lesion; the results are surprising."

We are inclined to believe that the superiority of the static machine for treatment of nervous affections will remain undisturbed, because of its low amperage. Yet Dr. Geyser in the course of his experiments discovered an unusual amount of residual or static discharge in and around his tube.

By substituting the crown electrode for the X-ray tube and connecting it with one terminal of the double valve tube rectifier while the other terminal was grounded, "a distinct breeze was felt, not unlike a static breeze." Further experiments seemed to reproduce from the rectified X-ray coil all the various currents of the static machine, and finally these were shown to be identical by connecting the terminals of the double valve tube rectifier to the two sliding rods of the static machine (which had previously been started into action in order to make sure that it was in a state of discharge): the coil circuit was closed, the sparks allowed to play between the sliding rods and the static machine started, picking up the current without the loss of a moment.

The great majority of X-ray operators to-day prefer a good coil to the static machine, partly because the latter is unreliable in damp weather but largely because it is sadly lacking in amperage. quantity-amperage-of electricity from the static machine is still unsatisfactory for some purposes, even by driving forty five foot plates 3,000 revolutions a minute. With a coil the potency (electromotive force) and the quantity (amperage) have practically no limit. But the induced current has heretofore always been an alternating current; the X-ray effect is produced by the current induced in the secondary wire upon the break of the primary circuit because this is several times as strong as the reverse current which follows the make of the primary These reverse currents interfere with the focusing and the clearness of the X-ray, they cause its unsteadiness or flickering and produce a large number of secondary rays on the outside of the tube which make the radiograph flat and devoid of sharp outlines; it is quite conceivable that they burn by disrupting the tissues.

Those who have been timid about applying the X-ray to the eye or ear should be emboldened to avail themselves now of this valuable therapeutical agent in the treatment of trachoma and iritic adhesions. The thought arises: now that the secondary current is unidirectional we will be able more accurately to measure it. by the milliamperemeter or by some new instrument; we may also hope that the problem of radiometry will prove a little easier of solution.

Immature Cataract. The principal objection to the extraction of immature cataract, says A. E. Bulson, Jr., has been that in the attempt to remove a lens not entirely opaque more or less of the cortex remains, which adheres to the capsule and is difficult, if not impossible, to remove without subjecting the eye to trauma, which later gives rise to inflammatory reaction and jeopardizes the function of the eye. If allowed to remain it will either produce secondary cataract, with attending impairment of vision, or inflammatory reaction and danger of damage to the function of the eye, or both. In considering the advisability of attempting extraction the factors to be considered are: The state of vision in the fellow eye; how rapidly the cataract is progressing; how seriously the patient will be inconvenienced if he waits for maturity; what contra-indications are there to the extraction, even though immature. No extraction of an unripe cataract is warranted when the fellow eye has vision sufficient for the patient's needs. It is particularly contra-indicated in a lens swollen by imbibition, attended with shallow anterior chamber and sluggish pupil from an irritated Successful results from the extraction of unripe cataract must come from the adoption of methods which make it possible to remove, at the time of operation, practically all the cortex, with a minimum amount of trauma and subsequent inflammatory reaction, and the employment of treatment to limit reaction and promote resorption of any retained cortical substance. The operative essentials to bring about the result are: A large corneal section, not less than two-fifths of the corneal circumference; an iridectomy with a fairly large coloboma extending to the ciliary border; a large opening in the capsule by two incisions at right angles to each other; gentle irrigation of the anterior chamber with a sterile normal salt solution; the early and free use of atropin and the use of dionin after the corneal wound has closed.

Bottles Containing Poisons, whether or not for external use, should be roughened by a pattern on their surface so that they will be instantly recognized, even in the dark.

#### MYDRIATICS AND MYOTICS.\*

### CHARLES DEADY, M. D.,

#### New York.

N discussing this subject perhaps the first thing to be said is that no effort should be spared to insure the absolute purity of the cirug used. I have seen a single instillation of a four grain solution of sulphate of atropin, fortunately in other hands than mine, but used under proper precautions, put a patient in bed for six weeks, and during the year and a half following that I was able to watch the case the health of the patient, as a result of the drug, remained seriously impaired. In this case the atropin was found to be impure, and to contain other powerful chemicals.

To avoid such a catastrophe care should be taken to know that the substance used is of the best quality, that it is fresh, and so far as possible aseptic. This is comparatively easy in large cities, but to practitioners in places remote from the great centers the situation at times is more difficult, and in such cases the problem may only be solved by the use of the drug in the form of discs, which, when properly prepared, should be stable and meet all requirements.

The question of personal idiosyncrasy is also to be considered. Thus certain patients are extremely sensitive to a given drug, and if this fact is unknown to us, very uncomfortable symptoms may be evoked by using it even moderately. In some cases we are able to obtain this information as a result of a previous experience on the part of the subject, and can then use a substitute of similar action.

The age and condition of the patient are also factors of moment. The careless use of atropin in infants or young children has often produced alarming results; even a single installation of the drug in a young child should be of the smallest amount, smearing it on the conjunctiva with a glass rod rather than using the quantity discharged by a dropper. Similarly it may be extremely dangerous in aged and feeble subjects

<sup>\*</sup>Written expressly for this JOURNAL.

to use such powerful mydriatics as hyoscyamin and duboisin. As a general statement it is best, whenever possible, to begin the use of such solutions in small quantities at considerable intervals, until the system of the patient is sufficiently habituated to the treatment to establish tolerance, and it is remarkable, in cases of serious disease where frequent use must be made of drops for long periods, to note the extreme degree of toleration which may be attained in certain cases. The writer has seen the four grain solution of atropin used every two hours for months without producing any serious or even annoying symptoms.

Where there is a liability to glaucoma all mydriatics are interdicted and no such instillation should ever be made in a patient in adult life without first taking the tension. In some cases where the tension is entirely normal a peculiar stiffness of the sclera to the finger, which can hardly be described, warns one to be careful, and such cases are watched very particularly if they are subjected to mydriasis.

In rare cases the practitioner is placed between two fires by the occurrence of iritis in a glaucomatous patient. Here there can be no hesitation in attempting to dilate the pupil, for, if adhesions of the iris to the lens be allowed, the result will be impairment of the lymph, circulation of the eye and the consequent aggravation of the glaucomatous tendency. In such cases we may use, with great care and constant watching, a 1/2 per cent. solution of scopolamin hydrobromate, as this drug has the reputation of being less liable to produce glaucomatous symptoms than any other strong mydriatic. In my service in the New York Ophthalmic Hospital several years ago I cured a case of glaucoma by such instillations of scopolamin after eserin had failed. The solution was alternately used and withdrawn several times until we were thoroughly satisfied that the fall of the tension was wholly due to its use This case was reported at the time by Dr. F. G. Ritchie, and, if I mistake not, was the first occasion that the peculiarity of scopolamin was placed on record. Dr. Bates, of Hamilton, Ontario, Canada, reported a case in which excessive tension was reduced by hyoscyamin hydrobromate, which is easily accounted for by the fact that this drug is identical in its formula with scopolamin, and probably nearly so in its physiological action, and further that it sometimes produces severe and painful spasm of accommodation.

In a case of iritis occurring under the above conditions, it would be of great service to combine the instillation of scopolamin with a rather vigorous massage of the eyeball with the tips of the forefingers; this

massage not only tends to break down irritic adhesions in the shortest time and with the least possible amount of the mydriatic, but at the same time is a very efficient means of reducing tension if not too excessive in degree.

If mydriatics and myotics be made up as ointments instead of solutions, the substance is longer in contact with the eye, better absorbed, and hence acts longer and more deeply.

The addition of cocain to mydriatic solutions also renders them more efficient by its direct action on the dilator fibers of the iris and ciliary muscle and its general action in contracting blood vessels, thus increasing the power of absorption. It is well to caution the physician in this connection that increased efficiency means also increased danger of poisoning; serious symptoms seem to occur more frequently from the use of certain of these drugs when they are combined with cocain than when they are used alone. In passing it is also to be noted that the action of mydriatics is retarded by cold and increased by hot applications.

Mydriatics are used for three purposes: To dilate the pupils for examination of the fundus, to paralyze the accommodation in order that we may ascertain the exact state of the refraction of the eye, and to hold the pupil in a state of dilatation in certain diseases. It is manifest that in the first case we require a medicament which will dilate the pupil quickly and fully, will have as little effect as possible upon the accommodation, and will speedily lose its action and allow the eye to return to the normal when our purpose is accomplished. In the second instance we must use a powerful cycloplegic, which will paralyze the ciliary muscle thoroughly as quickly as possible, and with the smallest number of instillations, and will also, as in the previous instance, allow the most rapid recovery in order that the patient may be able to read again, and to return to his business in the shortest possible time. Finally, in cases of disease where it is necessary to keep the pupil dilated we need a drug with the most energetic and lasting action, one that will dilate the pupil thoroughly and quickly, and that will keep up its action for the longest period.

In order to estimate the value of the various mydriatics it is well to know their relative strength of action when the same amount of each is used, and for this purpose we may refer to a table given by De Schweinitz in his "American Text Book." Taking homatropin as the standard, or 1, the relative strength of the list of drugs is as follows:

atropin sulph., 30; daturin sulph., 60; hyoscyamin sulph., duboisin sulph. and scopolamin hydrobrom., each 75; that is, the last three named are 75 times as active in the same quantity as homatropin. The effect after instillation is first noticed in daturin, hyoscyamin and duboisin in ten minutes, in atropin in twelve minutes, and in scopolamin and homatropin in fifteen minutes. The beginning of the maximum effect occurs in forty minutes from daturin, hyoscyamin and duboisin, and in one hour from atropin, scopolamin and homatropin. Recovery is complete from homatropin in two days, scopolamin six days, hyoscyamin and duboisin eight days, daturin ten days, and atropin fifteen days. In my experience the time of recovery in the cases of homatropin and scopolamin is shorter. In addition to this it may be said that atropin, daturin, hyoscyamin, duboisin and scopolamin act profoundly as cycloplegics, producing absolute paralysis of accommodation. Homatropin has the same action but much less in degree, and is considered by the writer as of very little use in this field. The difference of opinion respecting homatropin as a cycloplegic is difficult to understand. Many of our best men will not use it for this purpose, regarding it as entirely unreliable, while such men as Weeks, Savage, Jackson and Casey Wood consider it entirely efficient.

In our opinion scopolamin hydrobromate is the best cycloplegic which we possess. This is a salt of the alkaloid of the scopolia atropoides with the formula C<sub>17</sub>H<sub>28</sub>NO<sub>8</sub>H Br. + 3½ H<sub>2</sub>O. It appears in colorless hygroscopic crystals soluble in water and alcohol. It is said to be identical with hyoscin. It has a very powerful action, and is highly poisonous. It is used in solutions of from 1-1000 to 1-200, and it is spoken of by various authorities as producing staggering, dizziness. irregular and rapid pulse, sleepiness, dry throat, etc., at times, even in the weaker of these solutions. It would seem that some of these symptoms must be due either to impurity or to careless handling, as we have used the drug in a solution of 1-200 almost daily for ten or twelve years, and have never seen any serious symptoms from it in a single The worst that has ever occurred has been dizziness and dry mouth and throat, similar to what is frequently seen under atropin. To lessen the danger from this cause the following precautions are observed in its use in refractive work: The drops are instilled once at night on retiring, once the following morning about two hours before the patient presents for the test. Care is taken that the stomach is not empty. If the solution is applied with a dropper the puncta are closed with the fingers until the excess of fluid has run over the lids and been wiped away. In doubtful cases (young people or feeble adults) the conjunctiva is merely smeared with the solution on a glass rod. The drug must be of the best quality and the solution fresh.

Used in this manner scopolamin leaves little to be desired for refractive work. It paralyzes the ciliary muscle as well or better than any other drug, as I know from actual experiment in my clinics in the New York Ophthalmic Hospital. It acts as quickly, with as small an amount of the drug, and with as little reaction as any mydriatic, and the patient is able to read No. I type in from four to six days, depending on the age and other conditions. The same cannot be said with truth of any other substance used for this purpose.

Scopolamin is also valuable in inflammatory diseases, acting practically as well as atropin with less tendency to irritate the conjunctiva, but here the more persistent action of atropin is desirable, and the latter is also considerably less expensive. With a glaucomatous tendency present, of course, scopolamin is to be preferred. The antidotes to scopolamin are muscarin and tannin.

Atropin sulphate has had a longer and more general use than any other mydriatic, dating back to 1833. It is the alkaloid obtained from the leaves and roots of the atropa belladonna with a formula (C<sub>17</sub>H<sub>28</sub> NO.), H.SO. It is a white powder of an acrid bitter taste, soluble in 130 parts of water, three parts alcohol or sixteen parts ether. Its antidotes are morphin and pilocarpin. It produces in an aggravated form all the symptoms of belladonna poisoning. It is, perhaps, most often prepared in a solution of four grains to the ounce. Atropin was formerly in common use as a cycloplegic in refractive work, but has been discarded by many oculists in these cases since the advent of scopolamin. While it is entirely efficient as a cycloplegic, it is no more so, and sometimes even less so than the latter, and the duration of its action, extending from two to sometimes as long as six weeks (I have personally seen patients unable to read for the longer period from three instillations), causes a loss of time from business which many patients can ill afford, especially as there is no advantage to be gained by its use.

During infancy and childhood patients are particularly susceptible to atropin, and alarming symptoms may easily occur even when the usual precautions are taken. It is in the inflammatory diseases of the uveal tract that the sphere of atropin properly lies. Here its powerful mydriatic action, its tendency to reduce congestion, and the duration of

its effects combine to make it, generally speaking, the most valuable of all the drugs used for this purpose. In iritis it affords us all the aid to be obtained in maintaining a maximum dilatation of the pupil, as it not only paralyzes the sphincter pupillæ supplied by the third nerve, but at the same time by its stimulating effects on the sympathetic causes an increased effort on the part of the dilator fibres of the iris. In severe cases the desired effect may be more quickly attained by using the pure drug in crystal form in the lower cul-de-sac. This must, however, be done by the surgeon in person, and the patient carefully watched. It is contraindicated in any case where a glaucomatous tendency is suspected, as it is believed to be even more liable than the other drugs of similar action to induce attacks of this disease.

Where mydriasis must be maintained for long periods, while atropin is the best mainstay that we have, it should occasionally be suspended for a few days and scopolamin or other similar drug substituted, both on account of the tendency to general poisoning by absorption, and to prevent the onset of follicular conjunctivitis, which frequently follows such extended use.

In cases of nuclear cataract or in slow forms of cortical cataract where most of the degeneration is in the pupillary area and dilatation of the pupil, in order that the patient may see through the clear periphery of the lens is desirable, atropin is the best mydriatic to use. In a solution of one grain to twelve ounces of water, applied every two or three days, it will keep the pupil large without interfering with the accommodation, and afford the patient much comfort.

Hyoscyamin hydrobromate is from the alkaliod of hyoscyamus, and its formula is  $C_{17}H_{23}NO_2HBr$ . It appears in yellowish-white deliquescent amorphous masses, with a tobacco odor, and a nauseous taste. It is soluble in 0.3 parts of water and two parts of alcohol. It (the alkaloid) has the same formula, and is said to be identical with daturin and duboisin. To the homoeopathic physician, however, identity of formula and of crude action do not necessarily imply that drugs have precisely the same medicinal effects, and any practitioner of long experience can call to mind evidence of much difference in the dynamic action of drugs, which, so far as chemistry can inform us, appear to be precisely the same. Hyoscyamin is very powerful and very poisonous. In solutions of ½ per cent, to ½ per cent, it produces profound mydriasis and cycloplegic inside of one hour. It is, however, much less used than formerly, having been found to be at times very violent in its ac-

tion, and in those past middle age positively dangerous. Twice we have seen patients unconscious from its effects. Further, it has the peculiarity of occasionally causing a powerful spasm instead of paralysis of the ciliary muscle, accompanied by severe pain. This alternate action may account for the fact that plus tension may be reduced by hyoscyamin, as reported by Dr. Bates. Of late years the drug has only been used by us to change off from atropin in inflammatory cases and never as a cycloplegic in refractive tests. The antidotes are the same as in the case of atropin.

Duboisin sulphate, from the alkaliod of the duboisia myoporoides,  $(C_{17}H_{25}NO_8)_2H_2SO_4$ , said to be identical with daturin and hyoscyamin, produces effects similar to the latter in its coarse action, and is also liable to be dangerous after middle life. It has been used mainly in a strength of  $\frac{1}{4}$  per cent. to  $\frac{1}{2}$  per cent., and is a powerful and reliable cycloplegic, paralyzing the ciliary muscle completely with a recovery several days sooner than under atropin.

About twenty-five years ago the writer noticed something peculiar about the action of solutions of duboisin, as then used in the clinics of the New York Ophthalmic Hospital, and made a proving of the drug upon the healthy subject. One of the results was a fully developed case of retinitis of so intense a character that we dared not continue the proving. Since that time we have cured several cases of idiopathic retinitis by giving duboisin internally, and use it by instillation in 1/4 per cent. strength in those cases of inflammatory diseases of the fundus, where it is desirable to use a mydriatic simply for the purpose of placing the parts at perfect rest. Such instillations, of course, not being necessary oftener than once in two or three days.

Aside from this and as an alternate with atropin in long continued uveal inflammations, we make no use of the drug at the present time. The antidotes are muscarin and pilocarpin.

Daturin sulph.  $(C_{17}H_{28}NO_8)_2H_2SO_4$ , white crystals, soluble in water and alcohol, is equally powerful, and said to be identical with hyoscyamin and duboisin. Its general action is the same as the above drugs and atropin, and it can be alternated with them in suitable cases. We have had little experience with it. It is antidoted by opium. It is usually made in solutions of two to three grains to the ounce.

Homatropin in our opinion is a much over-rated drug. It is a derivative of atropin, and is commonly used as the hydrobromate, the formula being C<sub>16</sub>H<sub>21</sub>NO<sub>3</sub>H Br., soluble in ten parts water or 133 parts alcohol

Its antidotes are artificial respiration, stimulants and heat. It is ordinarily prepared as a mydriatic in a 1 per cent. solution. mentioned it has a weak action, comparing only as I to 75 in strength with scopolamin, duboisin and hyoscyamin. This weakness makes it valueless as a therapeutic agent, as its mydriatic properties are easily overcome by inflammatory action. As a cycloplegic it is of very doubtful utility as it will never produce paralysis of accommodation by a single instillation, even of a saturated solution. To obtain cycloplegia it is necessary to use the drops repeatedly at short intervals, say from six to eight times, ten minutes apart. Even then the effects vary with the personal equation, and while a fairly good result may be obtained in a patient of middle age, it is perhaps impossible to thoroughly paralyze the accommodation in childhood and early youth. The difficulty is that the action is so variable that we never know exactly what we have in a given case, and in our opinion the abolition of such uncertainty is the prime reason for using a cycloplegic. In cases where for business reasons it is impossible for the patient to go without reading for four or five days homatropin may be taken as a makeshift, as its action is so evanescent that the ciliary muscles recover sufficiently for all practical purposes over night, but no surgeon will ever succeed in doing fine refractive work by such means.

Although weak as a cycloplegic this drug is by no means to be trifled with, as it may cause inco-ordination, collapse and hallucinations when used too strong or too often, as well as conjunctival irritation and uveal or retinal trouble.

Homatropin was formerly much used as a single instillation to dilate the pupil for the examination of the fundus because of its slight effect on accommodation and quick recovery. For this purpose, however, it has been superseded by newer drugs of still more evanescent action, like mydrin and euphthalmin.

Mydrin is a mixture of one hundred parts of ephedrin and one part homatropin. It is a white powder, soluble in water, and is used in a 10 per cent. solution. It produces a wide dilatation of the pupil in thirty minutes, with little or no effect on the accommodation. Its effects pass off in about six hours.

Euphthalmin (C<sub>10</sub>H<sub>25</sub>NO<sub>3</sub>HCl) is a synthetic alkaloid. It is the hydrochloride of the mandelic acid derivative of eucain B. It is a white powder, soluble in water or alcohol. In a 5 per cent. solution it dilates the pupil in thirty minutes with no disturbance of vision except

that due to dazzling. The pupil returns to the normal in from five totwelve hours. It is probably the best drug for examination purposes, its action being quick, deep and brief, with no effect on the accommodation, no pain, no toxicity, no action on tension, and no effect on corneal epithelium. It acts more slowly and with less intensity in aged patients.

Having finished the group of mydriatics, which are practical and useful in ophthalmology, we turn to the myotics, beginning with the most powerful, eserin, an alkaloid of Calabar bean, commonly used as the sulphate  $(C_{15}H_{21}N_3O_2)_2H_2SO_4$ , identical with physostigmin, appears as yellowish-white deliquescent crystals, soluble in water and alcohol. The fluid preparation is nearly colorless, but becomes red by standing with loss of some of its power. Solutions from ½ per cent. to I per cent. are recommended, probably the ½ per cent. is most frequently prescribed. Antidotes are artificial respiration, stimulants, chloral hydrate and atropin.

The effect of eserin is the opposite of atropin. It contracts the pupil and produces spasm of accommodation and consequent temporary myopia. Its action, however, is much less powerful and much shorter in duration. Contraction of the pupil and spasm of the ciliary muscle begin in from five to ten minutes after instillation.

The maximum effect is reached in thirty to forty-five minutes, when the pupil becomes of pinhead size, and the far point in the emmetropic eye may be only six inches, the near point being three to four inches.

After two or three hours the pupil begins to dilate again, but takes two days or more to reach the normal size. The spasm of accommodation passes off in three or four hours. The contraction of the pupil is greater than is produced by the brightest light, but the response to the light stimulus is not abolished, as can be proved by alternately exposing and covering the fellow eye, when the consensual action of the pupils will be observed.

Eserin is our most powerful myotic, but it is a very disagreeable drug to use, as it causes severe cramp in the eye, headache and nausea. These symptoms are not due to poisoning, but to the severe stretching of the nerves of the iris by the extreme contraction of the pupil and the pressure on nerve fibers by the cramp of the ciliary muscle. It also causes great irritation of the conjunctiva in many cases if used for any length of time.

Another form of the drug, the salicylate, is less irritating, and also keeps better than the sulphate, which, however, keeps indefinitely, and is much better borne by the patient if the solution be prepared with sterilized oil.

Eserin overcomes the effects of homatropin completely, but when used to offset the action of atropin and the other powerful mydriatics it fails. having only a partial and temporary effect.

In glaucoma it is very useful pending operative procedure; in the milder cases it may even reduce the tension to the normal and hold it there. Its action is by contracting the pupil to the extreme, thus drawing the iris from the periphery toward the centre and freeing the iritic angle, thereby facilitating the lymph circulation of the bulbus.

In peripheral ulcers of the cornea, threatening perforation, the instillation of eserin tends to proper this result by lessening tension, also by holding the pupil to be publicated to perforation be inevitable the pupillary edge escape entanglement in the opening, which is promptly stopped up, after the evacuation of the aqueous, by the base of the iris coming up against it like a blanket, being held there by the tension of the ball until glued fast to the bottom of the ulcer by plastic exudate.

In some cases of them There where the iris is not complicated the use of eserin, ¼ per cent. ab initio, hastens the healing by reducing the tension and preventing photophobia.

Pilocarpin, an alkaloid of jaborandi, was discovered by Hardy in 1875. It is used as the hydrobromate, the formula being  $C_{11}H_{16}N_2O_2$  HBr, and appears as white hygroscopic crystals, soluble in water and alcohol. Its antidotes are atropin, ammonia and brandy.

The most usual strength of solution is I per cent. to 2 per cent. Its action is similar to that of eserin, but much weaker. On the other hand it does not cause the disagreeable symptoms in anything like the same degree as the latter, and is much better borne by patients even in the strongest solutions.

Contraction of the pupil begins in fifteen minutes after the instillation of pilocarpin, reaches its maximum in thirty to forty-five minutes, and disappears in twenty-four hours. Spasm of accommodation begins in fifteen minutes and lasts two and one-half hours only.

The drug keeps well in solution for a long period, causes very little irritation of the conjunctiva, and may be used almost indefinitely without troublesome symptoms; the principal objection to it is its high price.

Arecalin hydrobromate, C<sub>8</sub>H<sub>18</sub>NO<sub>2</sub>HBr., introduced by Merck to the profession in 1894, is a preparation from the alkaloid of the areca catechu, or betel nut. It occurs in white crystals, soluble in water and alcohol, and is used in a 1 per cent. solution. It is recommended by some authorities as probably the best all around myotic, as its action is intense and rapid, causing a maximum contraction of the pupil in tenminutes. It keeps better than eserin, acts more powerfully than pilocarpin, and is much less expensive. It is said not to produce headache and other troublesome symptoms like eserin, even after repeated applications.

When the solution is dropped into the eye it occasions a feeling of heat with a certain amount of spasm of the lid and lachrymation, followed by hyperæmia of the conjunctiva, which disappears in a few minutes.

The duration of action, however, is short, as a return to the normal commences in thirty minutes, and is complete in less than ninety minutes, Bietti has reported a case in which arecalin reduced the tension in glaucoma after eserin had failed.

151 West 73d Street.

Atrophy of the Glands at the Base of the Tongue a sign of syphilis. Visual examination is entirely untrustworthy. The patient is instructed to protrude the tongue as far as possible, and it is grasped by the left hand of the observer with a piece of gauze or a soft towel, while the index finger of the right hand is carefully introduced along the dorsum of the tongue to the circumvallate papillæ. The territory behind the triangle of the papillæ is now delicately explored. From these observations the conclusion is reached that when the papillary glands at the root of the tongue are normal, syphilis is properly to be excluded, while typical atrophy of these glands in an individual below the age of fifty years is indicative of syphilis. On the other hand, a moderate or slight degree of atrophy is of little diagnostic significance.

Rubber Gloves should not be worn after immersion of the hands in mercuric bichloride, I to I,000, because the sulphur in the glove combining with the mercury remaining in the skin will form mercuric sulphide and blacken the nails. Following formalin, even if it is dilute, severe dermatitis or violent paronychia may ensue—unless the formalin be thoroughly rinsed off.

#### AN ERYSIPELAS CASE.\*

## LEIGH Y. BAKER, M. D.,

# Washington, D. C.

HE following is a case which presents some peculiar features and is interesting as a study: On February 24th I received a telephone message saving that F. W. M., aged 65, was suffering greatly with an abscess of the middle ear, and that he would be in my office in a short time. I directed that the patient go to bed, and that I would call at his house as soon as possible. In about fifteen minutes, however, he appeared at the office, and I made an examination; the only symptoms, either subjective or objective, being pain in front of the left ear, and in a small swelling on the anterior wall of the external canal. His temperature was normal. I had a c'ear view of the ear drum, which was normal in every way save a dullness of the light code. The external canal was not sensitive to touch save over the swelling. He said that in no way did he feel other than normal except for the pain. I urged him to stay in bed, however, but in spite of that he appeared at the office early the next morning, when the swelling had nearly closed the external meatus, and I incised the anterior wall of the canal nearly through its entire length, which gave considerable though transient relief from the pain. His temperature was still normal.

His condition remained about stationary until the morning of March 1st, except that the pain became intermittent, and he had many long periods of complete freedom from pain.

On the morning of this latter date I was summoned to his house, and found him slightly delirious, with a temperature of 100°; there was a slight swelling in front of the left ear.

In the afternoon the temperature was 101°, delirium more marked and the swelling in front of the ear considerably larger.

I called Dr. Macpherson Crichton in consultation, and decided to explore the anterior auricular swelling, but found no pus.

<sup>\*</sup>Written expressly for this JOURNAL.

On the morning of March 2d there was no appreciable change except in temperature, which was 103.4°; in the afternoon he was removed to the hospital with a diagnosis of erysipelas; his temperature on admission was 104.6. Up to this time there was no rash, but by evening it was well-marked, appearing first in hair above the ear.

March 3d, temperature 102.6; leucocytes. 24,000.

March 4th, the erysipelas had involved the left eye, all the nose and back on the head to the vertex. Temperature, 100°.

March 5th, the swelling within the external meatus had been rapidly diminishing, and an examination of the tympanum showed a slight bulging. His temperature had risen, and he was more restless. I punctured the tympanum at the lower edge of the bulging, and the withdrawal of the knife was followed by a drop of pus.

March 6th, temperature, 100°; mental condition much better; leucocytes, 16,000.

March 7th, temperature, 99.5°; leucocytes, 14,000. Erysipelas has ceased to spread.

March 8th, 9th, 10th, the improvement continued.

March 11th, morning, his condition was good, but at 2 P. M. I was called to the hospital and found the patient again delirious, erysipelas actively extending to the right side of head and down the back of the neck. The ear drum was again bulging; on pressure was relieved by paracentesis. Temperature, 102.6°.

March 12th, erysipelas slowly extending down the back. Temperature, 100.8°.

March 13th, erysipelas has ceased to extend. Leucocytes, 14,000; temperature, 100°.

The condition improved rapidly with decreasing temperature, and on March 21st he was discharged from the hospital.

Convalescence was somewhat slow, but the patient is now in as good condition as ever.

Internally the remedies were sambucus, nigra belladonna and rhus tox., in the order named,

Locally, the ear was swabbed clean every four hours, and then packed with equal parts of boric acid and zinc oxide. The nares were swabbed every two to four hours.

The diseased area on the head was dressed first with bichloride solution, 1:3000, then ichthyol ointment was used, then calomel and lime

water (black wash), and still later, and with by far the best results, a 2 per cent. creolin and lanolin ointment.

Sambucus niger and what little local treatment could be given held this case stationary from February 25th to March 1st, and I believe the case would not have been so severe later had the patient taken better care of himself, and had not been exposed to the weather.

The rapidly beneficial action of 2 per cent. creolin ointment has led me to use it in local inflammatory conditions of the ear with universally good results.

1329 L Street, N. W.

Green Soap. Heat 40 ounces linseed oil to 140° F., dissolve thirteen ounces of caustic potash in 67 ounces of hot water, then add four ounces of alcohol, and allow to cool. The heated oil may then be added, stirring constantly. Let stand twelve hours—Denver Medical Times.

In Colorado it is forbidden by the law to give a prescription for alcohol to anybody without making an examination of and without a fee from the patient. Violation of this law renders the physician liable to a fine of from \$100 to \$300.—American Medicine, November 18, 1905.

After the extraction of a foreign body from the cornea, a drop of (sterile) castor oil or vaseline between the lids will ameliorate the pain. Am. Jour. of Surg.

In fractures of the base of the skull, with bleeding from the ear, it is important to take especial pains to prevent ear infection.—Am. Jour. of Surg.

Glass Balls for Treatment of Trachoma and Pannus. Likiernik, of Lodz, has obtained fine results in 310 cases of more or less chronic granular eye affections by local massage with a glass ball mounted on a long handle. The diameter of the ball is from 7 to 12 mm., and it is readily introduced under the upper or lower lid. After a few sittings the patient learns to use the ball himself. Diffuse granulations of years' standing yield rapidly to the daily use of the ball for merely thirty to sixty seconds, supplemented by the action of some antiseptic solution in which the ball is dipped before using. Pannus, if not too old, subsides quickly. Complications, such as infiltration of the cornea or indolent ulcers, do not contra-indicate the ball treatment. Sometimes before using the ball he moistens it with a weak mercurial or 3 per cent. boric acid solution.—Jour. A. M. A.

## THE NERVOUS EYE.\*

JAS. A. CAMPBELL, M. D.,

St. Louis, Mo.

In the good olden times, of not so very long ago, when the condition of the tongue and the beat of the pulse were the principal pointers depended upon in the diagnosis of disease, it is not very strange that mistakes were so common or that blundering was universal. The advances in medical science have been largely along the lines of a more exact interpretation of the varied signs of perverted action of physiological functions, or, as we call them, "symptoms" and which our old school friends designate as pathological indications, which are in reality but different terms for the same thing.

Now there is scarce an organ or a locality but may give to us valuable pointers; these taken together consist of the "totality of symptoms," so necessary and important to us when the diagnosis and treatment of disease is to be considered.

Of all the organs the eye surely stands near the head of the list, with its multiplicity of symptoms and indications when the question of "What is the matter?" is before us if we are able to read the story it tells us. We may have a clean tongue and yet be ill. The pulse and temperature may be quite normal and yet one may feel badly. But who ever saw a sick man whose eyes did not in some way show it. That the eye should thus be usually influenced by the varied ills of the body is not at all strange, if we consider how closely it is connected, directly and indirectly, with every other organ and function of the human body. This will be better understood and surely conceded, when we consider its wonderful nerve supply, which may be briefly stated as follows:

First, the optic nerve with its four hundred thousand fibers, inclosed in its protecting sheath, and which touches and dips into the whole brain, from the occipital region forward and through the ciliospinal fibers down through the whole spine itself. Then the third nerve, the motor oculi, supplying the levator palpebræ superioris, the internal,

<sup>\*</sup>Read at the Missouri Institute of Homocopathy.

superior and inferior recti, the inferior oblique as well as the sphincter pupillæ. The fourth nerve, going to the superior oblique, and a branch of the great trifacial or fifth nerve, and then the sixth nerve to the external rectus. The orbicularis palpebrum receives fibers from the facial or seventh nerve. And, finally, branches of the sympathetic nerve go to the dilating fibers of the iris and likewise to the muscular fibers in the upper eyelid.

Here we have a rich array of sensitive fibers, which may respond to every mental functional or physical impulse, no matter from what part of the human organism it may originate.

It seems unnecessary to remind you how the size and reaction of the pupils—the Argyle-Robertson pupil in tabes dorsalis, the pupillary reaction in the lesion of the pons. Wernicke's pupillary reaction in hemianopsia—help us to diagnose and locate brain disease or local disorder; nor is it necessary to dwell upon the revelations of the ophthalmoscope, which may show us a choked disc, and thus indicate cerebral tumor, or enable us to say that this patient has Bright's disease, or that one is anæmic, or here is an embolism, or there the heart is wrong, or in this case the sexual system is at fault, or that that which seems to threaten serious blindness is but a complication of hysteria.

These, with many other things, which might be spoken of, will, in a measure, show the importance of the nervous eye as an indicator of disease.

And finally, to illustrate the above, the following interesting case is offered:

Last June a little girl, 9 years old, was referred to me for examination and opinion.

Four days before, the mother first noticed that the child's left eye was badly crossed, turning in toward the nose. There was not the least pain or other unusual symptom connected with the case, except that she had organic heart disease with valvular lesion from childhood; otherwise she seemed perfectly well, cheerful and playful.

The child was taken to a reputable oculist who could find only hyperopic astigmia in addition to the paralytic strabismus. He prescribed glasses, warned them of the possible dangers connected with the case, and advised them to consult their family physician for further investigation. She was then sent to me. I, too, found hyperopic astigmia, with complete paralysis of the external rectus of the left eye. Both pupils were widely dilated, but this was from atropin sulph,

which had been used at the first examination. The eye tension was normal. The ophthalmoscope showed no abnormal indication in the inner eye.

Now the important question was, What was the cause of this sudden strabismus convergens without any other accompanying symptom?

There are only a few recognized causes for such a condition coming on as suddenly as this did: first, brain irritation, inflammation or lesion; also it sometimes ushers in an exanthematous disease, it has been found following intestinal irritation or worms, and it may occur in teething children from reflex irritation; but generally it is temporary in such cases, and is periodic or changeable.

The diagnosis under these circumstances must be reached by a careful examination of the symptoms present, and by exclusion.

The child seemed perfectly well in every other way, except the heart disease. She ate well, slept well. Her temperature was but slightly above normal. She had not the slightest pain, was cheerful, playful and mentally bright. There was not the least evidence of intestinal trouble or dental irritation, nor of any other reflex complication in any direction. It was plainly an involvement of the sixth nerve, which supplies only the external rectus.

If itwas a basal or pontal disease, it would in all probability have been associated with motor or sensory disturbance of other parts, as other important nerves originate near and accompany the sixth nerve in part of its course, namely, the third, fourth and seventh nerves—yet these were not involved.

Farther along in the course of the sixth nerve are parts where pressure points of small size could produce, in a limited space, this result without implicating other nerves or function.

The following was my conclusion: Her valvular heart lesion was responsible for embolic closure of some small cerebral terminating artery. Softening, localized irritation and progressive inflammation followed and pressure of the sixth nerve in its pathway forward caused the paralysis of the abducens. This is what I told the parents; they were warned of the threatened serious dangers present, the probable fatal termination in the near future was predicted, and quiet and general care advised.

The child died in convulsions four weeks later; was unconscious two days before death. Unfortunately no post mortem examination was permitted.

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Mermod-Jaccard Building.

# **DEFECTIVE EYES.\***

W. A. PHILLIPS, M. D.

# Cleveland, O.

OU have no doubt heard it said that there is no department of medicine which can point with greater pride to its achievements in particular directions than can ophthalmology. The statement is true enough.

Previous to about fifty years ago certain forms of impaired vision suffered by those not yet presbyopic went under the vague term of amaurosis. With the exception of presbyopia the real cause was not known. Eventually there arose on the horizon of opthalmological research a brilliant Dutchman, Donders, of Utrecht, who set himself the apparently impossible task of determining the cause of the obscure trouble in question. The detection of the trouble seemed all the more hopeless because of its being with rarely an exception congenital and not due to any inflammatory action of the eyeball, inside or outside. Independently of the impaired sight there was visible nothing the matter. He set about his task, however, in the most painstaking manner. He dissected and accurately measured thousands of human eyes, conducting his investigations over the most promising part of his life. As a grand result he ultimately demonstrated that all eyes are not equally an optical success, because of certain mechanical imperfections not common to all. Here was the secret—the black cat was out of the bag and blinking in the sunlight of a fresh, a wonderful, a most valuable discovery at last.

Perfect vision demands a perfect eye, demands an eye whose refractive power is sufficient and accurate enough to bring the rays of light into a perfect image on the perceptive layer of the retina. If, now, an eyeball in all other respects perfect is a little too long or a little too short in its antero-posterior diameter, some sort of a disturb-

<sup>\*</sup>Read before the Miami Valley Homocopathic Medical Society.

ance will occur. Or, again, if the cornea be curved less or more in given meridians than in others, imperfect vision is the result. From these mechanical imperfections singly and in combination spring several well-marked optical defects, namely, hyperopia, myopia and the various forms of astigmia. The mechanical imperfections cannot. of course, be remedied, but fortunately the optical defects springing therefrom are for the most part at the tender mercies of skillfully adjusted lenses.

When we consider the thousands upon thousands of school children who would have been almost entirely deprived of an education and later of access to any of a multitude of occupations, we do not have to contemplate the subject long to appreciate the boon which the studies of Professor Donders brought to the entire civilized world through the proper application of lenses.

Hyperopia is a congenital and to some extent an hereditary defect due to the circumstance that the eyeball is too short from before backwards. Unless this be of a degree greater than the amplitude of accommodation it does not impair distinct vision, and for this reason the defect has been repeatedly overlooked. In other words, simply because a child can see sharply at all distances between the near and the far point, it does not follow that he has no hyperopia. If, for example, a child is brought to you for a diagnosis of a case suspected of optical defect, and you find his vision is perfect for distance—that is, he can read No. XX at 20 feet—you are enabled to exclude myopia and the several forms of astigmia at once; for observe, now, with perfect vision, the child has no error of refraction at all, except possibly hyperopia. You may be certain that he has that or nothing in this line, because all the other errors of refraction affecting children produce impairment of sight. Note further, that you can get at the detection of hyperopia in a rough way by finding out whether the child can see as well with convex lenses as he can without. strongest lenses he can see No. XX with at 20 feet will constitute a measure of the so-called manifest hyperopia, unless spasm of the accommodation be present. By paralyzing the ciliary muscle with atropin or the like, the lenses that will make the sight perfect again will measure the total hyperopia; that is, the manifest and the latent Hyperopia is the champion defect so far as functional disturbances go-headaches, weariness of the eyes, gastric trouble

—nervous complications are not unusual, and cannot be permanently relieved without lenses suitably selected.

Myopia.—What is the cause of this error? Enough has been written on this subject to make a good-sized Carnegie library. A careful study of the subject by the oculists the world over has reduced the argument to the establishing of three causes as the determining agents acting in the following order of importance:

- 1. Constriction of the eyeball by the contraction of the ocular muscles in maintaining convergence of the eyes while exercising them at the near point.
  - 2. A weakening of the sclerotic tissue of the fundus of the globe.
  - 3. The action of the ciliary muscle.

In regard to the first cause, you are to bear in mind that the external muscles by their union with Tenon's capsule form a narrow band around the eyeball, and when the internal recti act to converge the eyes, as in reading, pressure is produced, extending all the way around the ball, the constriction being much as if a narrow ribbon were tied tightly around a ball of yarn. The posterior part of the ball being more distensible than the cornea, is consequently the region that yields to the pressure. Accordingly, the antero-posterior diameter of the globe is slowly lengthened and mechanical myopia is the result. Parallel rays now focus in front of the retina and a blurred image gives imperfect vision for distance.

So far as the second cause figures, this abnormal makeup of the tissue of the sclera around the entrance of the optic nerve seems to be for the most part a congenital affair, at any rate there is where the anatomical trouble shows up and is easily detected by the use of the ophthalmoscope.

Thirdly. The action of the ciliary muscle lends a more or less marked effect, especially during the initial stage of the performance. At this time it assists the recti muscles in constricting the ball, their action being nearly in the same plane. On the other hand, in proportion as the antero-posterior length of the ball increases there is a corresponding lessening of the action of the ciliary muscles for near work and a corresponding increase of their action for distance. This, by the way, is the only condition of the eye in which the ciliary muscle is brought into action for seeing distinctly at a distance. Although hyperopia and the different forms of astigmia occasion more head-

ache, pain in the eyes, and often general weariness of both body and mind, they do not possess the element of danger to sight that frequently accompanies myopia; for myopia is sometimes dangerously progressive, even to blindness; while hyperopia and the different forms of astigmia are usually stationary. They never increase, but may by excessive use of the eyes be modified or even entirely eliminated by the appearance of myopia. At this juncture it is important to call your attention to several practical points:

- 1. Hyperopia as such is not progressive and does not impair normal acuity of vision unless it is of a high degree. It is the one defect in the family of errors of refraction which occasions the greatest amount of functional disturbance.
- 2. The various forms of astigmia always produce impaired sight directly in proportion to their degree, with functional trouble added.
  - 3. The same is true of myopia.
- 4. School children very rarely suffer from headache that is not produced by some one or more of the errors of refraction. If a child is brought to you for a diagnosis of a refractive trouble and you find vision is perfect for distance—that is, he can read No XX at 20 feet you are enabled to exclude all forms of astigmia and myopia at once. Only supposition remains—there may be hyperopia. You can generally determine this question by noting whether the child can see as well, not necessarily better, with convex glasses, than he can with-The strongest lens he can see well with measures the manifest hyperopia. To ascertain the total amount of the error, the manifest and the latent combined, it is required that the accommodation be paralyzed by the use of atropin or the like. If, however, the sight is impaired for distance, then, as already said, you have either astigmia or myopia to deal with, or both. If concave glasses improve the sight, you have a case of myopia. If they make the sight perfect, this is the only error to demand attention—assuming there is no spasm. If the myopia is of low grade you are to look for a certain degree of myopic astigmia to account for the remaining part of the defect of sight. If the myopia is of a higher grade, say, from six to twelve or more diopters, the cause of the impairment above what can be corrected with lenses will be due to an impairment of sensibility produced by the bulging of the fundus. Provided general practitioners would inform themselves more thoroughly on this sub-

ject of myopia, advice might be given parents in regard to the early management of the cases, which would greatly, if not entirely, prevent children from being seriously handicapped all through life by imperfect vision. Use of the eyes for near vision at too early an age, or excessive use of them at a later age, is an ever present menace to good eyesight.

Impaired vision should be early detected and promptly corrected. Especially should this be so provided myopia has been developed. So far as this affection goes, school children should not be permitted to attend school before eight years of age, and then allowed to study their lessons only—not being allowed to do any reading outside of these for two years or more. Many a case of myopia has been developed by pupils being permitted on their return from school to drop into a corner and read for two or three hours a day. This pleases the parents, because it shows so much literary taste (?); but is liable to injure the child in more ways than injuring the eyes. In general, make of the child a sound, active individual first; there is ample time for study and reading later, remembering that without exception precocity means early failure of both mental and physical vigor.

89 Euclid Avenue.

In Cut-throat Wounds where the thyrohyoid membrane has been severed, it is necessary, in order to restore perfect phonation and deglutition, to suture this membrane accurately.

The greatest ultimate danger in cut-throat cases is the onset of a septic pneumonia. This may be obviated in a measure by closing up the pharyngeal wall, and by paying the strictest attention to asepsis.—Am. Jour. of Surg.

In Removing a Skin Suture, pull up on one side and cut it as close to the skin as possible. This is in order to avoid drawing any of the exposed part of the suture through the wound and thus possibly infecting it.—Am. Jour. of Surg.

In every case of injury to the nose, with or without fracture, it is well to examine the septum for displacement. If displaced it should be carefully restored, using a nasal plug, if necessary, to keep it in place.—
Am. Jour. of Surg.

# **HOARSENESS.\***

GEO. M. HAYWOOD, M. D.,

# Minneapolis, Minn.

HIS very common symptom (for hoarseness is but a symptom) is caused by and complicates so many different diseases, and is so frequently neglected that I hope a short paper on the subject may prove of interest. I am called on frequently by many of the prominent singers of the city as well as by singers from the local theatres, as well as others, to relieve them of hoarseness. In many cases I find not only a hoarseness but a laryngitis, rhinitis and bronchitis also. When the hoarseness is caused by a simple laryngitis it is usually soon relieved, but when complicated by an inflammation of the contiguous mucous membranes, which is usually the case, the relief is slower and more difficult.

The principal cause of hoarseness is an inflammation of the vocal cords, the result of acute or chronic laryngitis in connection with acute pharyngitis.

Hoarseness is a frequent complication of hypertrophic rhinitis, the catarrhal inflammation extending by continuity of tissue to the larynx, which is made subject to all the exacerbations which the nasal disease undergoes; a more frequent connection between hypertrophic rhinitis and laryngitis is the irritation kept up by the post-nasal discharges, which either drop into the larynx or trickle down along the posterior pharyngeal wall until the interarytenoid commissure is reached; here they accumulate to a degree and maintain the posterior portion of the larynx in a constant state of irritation which is further aggravated by the coughing and hacking induced. These cause hoarseness, cough and expectoration, and frequently phthisis is suspected. When hypertrophic rhinitis is sufficiently marked to prevent nasal respiration, oral breathing is another aggravating feature, the air reaching the larynx without being warmed, moistened and properly filtered, causing hoarseness. Gastric disturbances, especially those caused by debauchery, are

<sup>\*</sup>Read before the Minnesota State Homocopathic Institute.

frequent causes of hoarseness, as is often noticed in drunkards. Hepatic torpidity is another cause well known to singers who find difficulty in producing clear tones when bilious. Overuse of the voice in screaming or singing causes temporary congestion, which, if continued, results in a chronic state with permanent hoarseness. In singers a prolonged use of the voice frequently repeated is tolerated without harm under certain conditions, i. e., when the singer has received judicious training and uses his voice within its normal compass. The continued inhalation of air containing much dust or other irritating substances which accompanies many occupations is another frequent cause of hoarseness—marble cutters, street sweepers and miners being the class most affected.

PATHOLOGY.—The epithelial layer of the vocal bands is generally thickened, and the superficial vascular supply increased. The hypertrophic process many involve the entire mucous membrane, but in the majority of cases it is located in the posterior portion of the cavity, gradually extending to the other parts. The muscles are frequently the principal location of the inflammatory process. The principal cause of the hoarseness, however, lies in the thickened condition of the vocal bands or rather the membrane covering them; their vibration is devoid of the regularity and freedom necessary for the production of a pure tone, and the note is cracked or irregular. Besides the hoarseness caused by laryngitis and accompanied by rhinitis, pharyngitis or bronchitis, there are occasional cases of hoarseness caused by a paralysis of one of the vocal bands; this condition is easily recognized if one is familiar with the use of the laryngeal mirror, which will show the paralyzed band in a state of adduction or abduction, while the other is drawn beyond its usual limit by the breathing muscles. The necessity for such an examination was impressed upon me by a patient who had treated six months with a prominent general practitioner for hoarseness without an examination of the larvnx, he calling it larvngitis. I made a laryngoscopic examination and found at once the cause of the hoarseness, which was a paralysis of one of the vocal cords.

Another case of hoarseness of years standing I found to be due to a pachydermia laryngis or nodular tumor of the vocal cord. Another case which had been treated for bronchitis, and who was almost exhausted by the constant coughing. I found was caused by a parilloma the size of a pin's head, which, on removal, relieved the cough at once and the hoarseness in a few days. Another frequent cause of hoarseness, and

one not found in general work or practice, is a hypertrophy of the lingual glands at the base of the tongue, which impinge on the epiglottis during inspiration, causing an irritating and hacking cough with little or no relief from coughing or expectoration. There is an occasional choking and gagging spell from this cause.

I have operated on many cases of this latter trouble with satisfactory results.

I recently operated on a young girl of seventeen, tall, slender and delicate, who had been coughing and hacking all winter, and who had consulted the family physician a number of times. fearing lung trouble, but her physician found none, and did not discover the cause of the cough. I found the enlarged glands at the base of the tongue, which can only be done by the aid of the laryngoscope, and removed them, with entire relief from the cough, in less than a week.

A similar case had been treated by one of our prominent physicians for months for threatened laryngeal tuberculosis; removal of the enlarged laryngeal glands relieved her of her cough and hoarseness. I could enumerate case after case of such results, but it is unnecessary to dwell further on this cause of hoarseness; but I urge on the members of this society a thorough lingual, laryngeal and pharyngeal examination in obstinate cases of hoarseness, to discover, if possible, the cause of such disability.

Hoarseness is likely to occur in any of the various forms of pharyngitis, and in all of the tumors of the larynx, both benign and malignant. Syphilis is a frequent cause of hoarseness, involving, as it does, every tissue of the body.

TREATMENT.—The treatment of hoarseness depends upon its cause, duration and complications. In simple laryngitis the patient will recover quicker if he will stay in bed, and aconite given if there be fever with characteristic restlessness and anxiety, with short, dry cough. larynx sensitive to touch and inspired air. Also good after straining the voice. If free prespiration can be induced relief will be obtained more quickly.

During this stage inhalations of benzoin tincture, a teaspoonful to a pint of hot water, at 140°, used five or ten minutes every hour or two, is soothing and healing.

Ferr. phos. is similar to aconite, without its anxiety and restlessness. Bell. with swelling and dryness of larynx and pharynx, vocal cords bright red, cough dry and painful.

Phos. when there is hoarseness with rawness and soreness of larynx, dry, hacking cough, tightness of chest, talking aggravates. feels as if breathing through a sponge. Tickling in suprasternal fossa. In belladonna the thickening is higher up in the larynx itself.

Caust., rumex, sang., iodium, kali bich., etc., have all done good work in hoarseness according to indications.

Heroin, codein, morphine and muriate of ammonia are favorite drugs among the old school men. My experience with them singly or in combination with other drugs has not been as satisfactory in hoarseness as the indicated homeopathic remedies.

Chronic hoarseness accompanied, as it usually is, by rhinitis and pharyngitis, requires more time, skill and patience to relieve.

It is necessary in such cases to treat all the contiguous mucous membranes. Often operations are necessary, or cauterization of hypertrophied turbinals; also local application of sprays, douches, glyceroles, medicated oils, solutions, vapors, powders, etc. In case of hypertrophic rhinitis with excessive secretion and impaired nasal respiration, I remove nasal spurs or spines, straighten deflected septa or cauterize hypertrophied lower turbinals with electrocautery, chromic or trichloracetic acid, taking great care not to cauterize the septum or middle turbinal. In case I find adenoids or hypertrophied or diseased tonsils I always advise their removal.

A favorite remedy of mine in hoarseness is tangerine oil sprayed into the larynx under good illumination. It is very pungent and astringent, and in cases of singers who desire quick relief from hoarseness, I find it very satisfactory. I first spray with a solution of adnephrin, which I like better than adrenalin.

In cases complicated with bronchitis, such remedies as ant. tart., bry., ipecac, kali bich., hepar, phos., rumex, sulph., stan., etc., will be found useful and efficacious. In cases caused by paralysis, both local and constitutional, will be needed electricity, strych., nux, caust., phos. and hygienic measures must be resorted to. In case of papillomata, pachydermia laryngis or other benign tumors, their prompt removal will be the only chance for improvement. In malignant tumors and tuberculosis the prognosis is unfavorable, and any means that will facilitate or relieve the suffering in the late stages is justifiable. In syphilis of the larynx the prognosis is more favorable, but must be guarded, as it is impossible to tell how much destruction of the delicate structure will take place before its ravages can be checked.

301 Medical Block.

# NASAL OBSTRUCTION.\*

WILLIAM F. BEGGS, M. D.

# Newark, N. J.

T is not my purpose to go into this subject in an exhaustive manner, as the men whom I am addressing are largely general practitioners of medicine. The subject, however, is so important to you that I feel it will be wise to enumerate in a more or less extensive manner the various structures which go to make up a case of "nasal obstruction."

When opening the mouth the first structure which meets our gaze is the tonsil. Tonsils when enlarged are great factors in the production of obstruction. When co-existing with adenoids the best way to eradicate this trouble is, of course, a surgical procedure, which calls for a thorough removal. Ordinarily speaking, tonsils do little damage if not chronically hypertrophied.

The next structures to cause tihs trouble, as we go back of the nares, are the adenoid vegetations of the pharynx. When centrally located little trouble may be experienced other than a continual irritation during the cooler months of the year. When located laterally in the fossæ of Rosenmuller we may expect ear complications.

The enlargement of the inferior turbinated bodies are also productive of many obstructions and ear complications. The anterior ends when enlarged are not so apt to produce an ear lesion, but many reflex symptoms of the nervous type are frequently caused by this abnormal enlargement. Practically speaking, almost any long-continued irritation produced by the aforesaid pathological conditions is apt to be the cause of progressive deafness or suppurative conditions.

The enlargement of the middle turbinated body which acts as a gateway to the hiatus semilunaris—into which space we have opening the frontal, maxillary, sphenoidal and ethmoid cells or cavities—should lead us to look immediately toward this structure when symptoms of an in-

<sup>\*</sup>Read before the New Jersey State Homœopathic Medical Society.

flammatory sort point toward any or all of the sinuses. Therefore, the obstructions while nasal are, in a measure, more apt to point to regions outside of the nose.

A deviated septum has frequently a complemental curve. Therefore, we may have an obstruction anteriorly on one side, and posteriorly on the other. The correction of this deformity can frequently be made with measures less of a major sort than resecting the mucous membrane and doing the so-called window operation, or the crushing operation devised by the late Dr. Asch. These operations require considerable dexterity in the primary and after treatment; therefore, if the deviation is not of a high degree, attention of a surgical sort to the inferior or middle turbinal will often give our patient the relief sought for.

### NASAL POLYPI.

Rarely before the twelfth year do we find polypoid growths in the nares. The reason for this is that most polypi grow from the sinuses, and these cavities are rarely developed before that period of life. To show how few reflex symptoms may come at times from this condition: recently I operated a man w! o had been a sufferer for years with these growths. At different intervals he came to my office, and many of these polypi were removed. The time taken in removing represented about fifteen hours all told, and yet this man had never had so much as a headache, the only symptom being complete obstruction plus rhinor-rhoea.

Rhinoliths, which represent foreign bodies—such as beans, peas, shoe buttons, etc.—pushed into the nose, usually during childhood, and latter'y coated over with the various lime salts, are rarely met with; when present the diagnosis is more apt to be deferred until we have removed them. Many times the presence of a perforated septum can be accounted for by a rhinolith which has been continuously pressing and disintegrating the septal tissue until a perforation has taken place.

Alternating hyperæmia or engorgement no doubt gives the nasal surgeon more anxiety for its complete cure than almost any other of the enumerated causes of obstruction. From the standpoint of the general practitioner, in which capacity some ten years were spent, and a hand-in-hand observation and treatment of nasal surgery, it becomes more and more apparent to me that intestinal toxæmia plays a large role in the production of this annoving condition.

The matter can hardly be dismissed without my stating that careful

attention must be paid to the diet, clothing, proper amount of exercise, sufficient fresh air (especially at night), scientific heating of the house combined with the abstention from all stimulants and a careful regulation in diet.

17 Fulton Street.

Argyrol Solution must be fresh to be properly efficient.

It Does Not Follow that every child with school headaches or who holds the head close to the book needs to wear glasses.

For Atrophic Rhinitis: After the crusts are removed and the passages cleansed, spray daily with acetozone, one part, in three of some such oil as liquid petrolatum, liquid albolene, benzoinol, etc.. with, perhaps, a few drops of ol. gaultheriæ, etc., to make the odor more agreeable.

This may prove of value also in other suppurative conditions of the nose.

To Preserve Drugs From the Action of Light they, and their solutions, should be kept in amber bottles. Blue and green glass have little or no preservative effect because they permit the free passage of the actinic, ultra-violet, rays, which are the ones which are the most active chemically. The list of substances whose keeping properties are materially affected by light is longer than is generally supposed. An aqueous solution of mercuric chloride, exposed for nine months. gives a copious precipitate in a white, blue or green bottle, but if kept in an amber bottle throws down no precipitate.

Formalin in Erysipelas. Dr. Teutschlander, a Swiss physician, reports excellent results from the application of pure formol (formalin) to patches of erysipelas (La Scmaine Medicale, January 24. 1905). In two cases the patients had suffered from previous attacks of erysipelas, which went through the regular course. When treated with compresses moistened with a solution of formaldehyde, the dermatitis was arrested after the second dressing, the temperature fell from 104° F. (40° C.) to near normal, and cure was complete in four days.

Telephone Mouthpieces. Dr. W. Collinridge, medical officer of health for the City of London, has disproved (?) that telephones are a means of disseminating infection. Twelve mouthpieces, from various call offices, were subjected to careful bacteriological examination, and in none of them were any tubercle or diphtheria bacilli found. Dr. William G. Bissell, city bacteriologist of Buffalo, carefully examined several frequently used telephones and found no disease germs present.

# PRACTICAL HINTS.

Conducted by G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

Vaccination by Denudation. Cleanse the part to be vaccinated, moisten a piece of cotton with liuqor potassæ, lay it on the skin, allow to remain two or three minutes, wipe dry and use a toothpick, a piece of gauze or damp cotton to rub away the softened epidermis. There is slight friction only, unaccompanied by pain. In a few seconds we obtain a moist, shining surface and no bleeding. Apply vaccine in the usual way.

Yellow Glasses, which by reflected light look brownish but by transmitted light slightly orange, are indicated in all cases of retinal hyperæsthesia, in disease of the deep tunics of the eye, for mountaineering or motoring, and when blue or smoked glasses would be thought of. The tint should be very light if for use in artificial light rich in yellow rays. They are restful—"soft"—to the eyes, and do not seem to diminish the illumination of the visual field.

Cataract Extraction without iridectomy is counter-indicated when the lens is tremulous and when synechiæ are present.

Adrenalin is apt to predispose to secondary hæmorrhage. Forcing out the remnants of the lens by massage through the lid might infect the incision by material squeezed from the glands of the lid.

Axenfeld examines bacteriologically any secretion in the conjunctival cul-de-sac, and will not operate until all microbes have disappeared; in suspicious cases he makes a preventive subcutaneous injection of 10 c.c. of Roehmer's antipneumococcus serum.

Squint should be treated as follows: 1. Correct the refraction.

- 2. Treat the amblyopia and re-establish simultaneous vision with the diploscope.
  - 3. Prevent suppression.
  - 4. Correct the squint by operation, only as a last resource.

A Miligon is the angle subtended by 1-1000th of the circumference. Montano proposes that prisms be numbered by their angle of deviation in miligons. He also proposes—as did Mosfat about twenty years ago—to note the position of the apex—or "edge"—instead of the base.

Cauterization of the Right Inferior Turbinal, in a boy sixteen years old, was followed in three days by cellulitis (suppurative) of the corresponding eyelid and supra-orbital region.

Corneal Opacities, particularly if recent, clear up nicely under dionin, 4 to I grains in an ounce of vaseline, applied once or twice a day.

Staphylococcal Infection of the Conjunctiva is rare. It is characterized by unilaterality, moderate muco-purulent secretion, the formation of easily detachable pellicles, long duration and tumefaction and tenderness of the preauricular gland. It is preceded by some palpebral infection, such as hordeolum or blepharitis. The cornea remains intact. Staphylococci are found in cover-glass preparations of the discharge and in media inoculated with that fluid.

Hand Disinfection might be perfect if our hands would not perspire. Dr. Richard Schaeffer concludes that "by the hot water-alcohol method carefully carried out the hands can be so nearly germ free that the danger of the wound becoming infected from them is no greater than infection from the air" and from talking over it. He says that alcohol in itself exerts no noteworthy antiseptic action. The editor believes that borax in hot water may well precede the disinfectant in order to open the pores to empty them and to admit the disinfectant, and that formalin has a tendency to close them again and to diminish if not prevent perspiration.

Disinfectants should be mixed with a strong solution of common sense. The success of disinfection lies in personal attention to minute details. The causes of disease are little things; they cannot be seen. Trustworthy results can only be obtained by an accurate knowledge and experience. The materials to be used, their strength, the mode of application, and every step of the operation must be accurately carried out.

Pulsatilla contains a very volatile camphor-like substance which disappears in drying, hence it is at least partly lost in the process of trituration and in making tablets.

Argentum Nitricum in trituration or tablets is unreliable if not worthless, because the sugar decomposes it.

**Phosphorus** triturations are open to suspicion that the free phosphorus was changed by the oxygen of the air to phosphoric acid—a very different drug homoeopathically.

Cold Applications in Hay Fever. All other attempts to relieve the patients during a very bad attack of hay fever having failed, O. H. Wolner applied cold compresses to the man's forehead and face, wringing them out of ice water and reapplying them as soon as they began to get the least bit warm. In about three-quarters of an hour relief was obtained. The treatment was kept up constantly for about three hours, and off and on for about six hours. The patient did not have another attack that season. A year later the attack came on again. The patient applied cold compresses for about four hours, and was entirely relieved in twenty-four hours. The attack did not recur.

N	asce	ent Iodide of Silver For Trachoma.	
No.	I.	B. Argent nitr.       3j.         Glycerine.       5ij.         Aquæ       3j.	
		M. Sig. No. 1. Poison. For trachoma.	
			:
No.	2.	<b>B</b> . Potass. iod	
		<b>B</b> . Potass. iod	
		Aquæ	
		M. Sig. No. 2. Poison. For trachoma.	
of n	irect numb	tions: Mix each time one part of number one and two pber two; apply promptly to inner (lower) lid.	arts

Picric Acid. The eves are sore and ache after mental labor. Can not read because it makes the head so tired. A feeling of confusion in the nape of the neck. Pain in the occiput, possibly extending down the spine. Headache and nausea on moving the head. Is so tired; can not think or study; legs are so weak and heavy it is with the greatest effort they can be moved.

For Riggs' Disease—a manifestation of "gout"—brush vigorously and frequently the gums and teeth with a hard tooth brush liberally supplied with 50 per cent. alkalol. Give internally ten drops of tincture of urtica urens in a drink of water, night and morning. If the dentist savs there is calcific deposit follow the above with Hecla lava 30. four times a day.

Acetanilid Mixtures. The following analyses, condensed from the official report of the Council on Pharmacy and Chemistry of the American Medical Association, will be of interest to good homocopaths: Ammonol.

Acetanilid, 50. Sodium bicarb., 25. Ammonium carb., 20.

Antikammia.

Acetanilid, 68. Caffein, 5. Citric acid, 5. Sodium bicarb., 20.

Koehler's Headache Powders.

Acetanilid, 75. Caffein, 22.

Orangeine.

Acetanilid, 43. Caffein, 10.

Other constituents which were not determined.

Phenalgin.

Acetanilid. 57. Sodium bicarb., 18 Ammonium carb., 15.

Salacetin.

Acetanilid, 43. Sodium bicarb., 10. Sodium salicylate 20.

## SOCIETIES.

AMERICAN HOMŒOPATHIC OPHTHALMOLOGICAL, OTOLOGICAL AND LARYNGOLOGICAL SOCIETY.

The Hotel Dennis will be headquarters for the annual meeting of this society. Here we will meet and be associated together more or less intimately for the whole week, from the 10th to the 15th, and as our sessions will be held in a well lighted and ventilated room on the ground floor, we cannot possibly have a better arrangement. The meetings of the International Homeopathic Congress will be held on the Pier, which is within easy walking distance. If you have not secured accommodations here beforehand, come along at your earliest convenience. There will be others, and if the Dennis should have no more room you surely will be able to find accommodations at any time. Many homeopaths will be found at the Chalfonte, Galen Hall, etc. Come to Atlantic City, if only for one day. When buying your railroad ticket ask for a certificate entitling you to return transportation at one-third cost.

#### THE HOM COPATHIC MEDICAL SOCIETY OF THE STATE OF NEW YORK

Will hold its usual semi-annual meeting in Rochester on October 16th and 17th, and not in conjunction with the International Homeopathic Congress at Atlantic City in September, as erroneously stated in the latter's circular of announcement issued by its local publishing committee.

The time of the New York Society's meeting has been postponed one month in order that its members may attend and participate in the sessions of the Congress, but it will also have a rousing meeting of its own

Rochester is one of the most beautiful cities of the Empire state; the hospitality and public spirit of her physicians is established by countless precedents; nature's beauty and charm in October;—all these, with the splendid committee and bureau list chosen by President Collins, promise a delightful meeting.

The Western New York Homoeopathic Society, Dr. S. Wright Hurd, President, will join with the State Society in this meeting, and we are thus promised a large attendance and sessions of unusual interest. Physicians are earnestly urged to make their plans to attend.

Faithfully yours,

H. Worthington Paige, Secretary.

August 11, 1906.

## BOOK REVIEWS.

Physiological Economy in Nutrition, with special Reference to the Minimal Proteid Requirement of the Healthy Man; an Experimental Study. By Russell H. Chittenden, Ph. D., Ll. D., Sc. D., Director of the Sheffield Scientific School of Yale University and Professor of Physiological Chemistry; member of the Natural Academy of Sciences; President of the American Physiological Society; Member of the American Philosophical Society, etc. Pages 478. Illustrations (full page), 16. Published in New York: Frederick A. Stokes Co., 1905.

A few months ago we called your attention to the layman's reasons for the beneficial effect of a reduction in food consumption in "The A, B, C of Nutrition." The present work is a compilation of the results of strictly scientific experiments to demonstrate such benefit, made in The Sheffield Scientific School of Yale University, in table form, elucidated by text and photographs of the subjects. Experiments were made on men of different classes or positions in life; (a) the professional, represented by five professors or instructors in the university; (b) the laborer, by thirteen members of the U. S. Regulars, and (c) a combination of brain and body workers, by eight student athletes of the university. Examination of all these subjects included kinds and amount of foods ingested, chemical examinations of foods and certain excretions, effect on bodily weight, muscular strength, and endurance, mental alertness or reaction time, etc. In a word, they were about as comprehensive as one can conceive.

The conclusions thus scientifically deduced are far different from the teachings of the physiologists. The book is a necessity to anyone desiring an up-to-date, thorough understanding of digestion, especially to the physiologist, and to those treating diseases in any way dependent upon the formation of uric acid. Since of late it has been observed that the increase of uric acid in the system aggravates all catarrhal conditions, and vice versa, it is of interest to our specialists.

Whooping Cough cured with Pertussin, its Homoeopathic Nosode. By John Henry Clarke, M. D., author of "A Dictionary of Practical Materia Medica," "Homoeopathy Explained," etc. Lendon, England: James Epps & Co., 48 Threadneedle street, and 60 Jermyn street, 1906. Price, I shilling.

An instructive brochure of 72 pages, giving the clinical report of cases treated, and the deductions of the author. It will add a useful remedy to its readers' armamentarium.

Manual of Diseases of the Ear, Nose and Throat. By John Johnson Kyle, B. S., M. D., Clinica! Professor of Otology, Rhinology and Laryngology, Medical College of Indiana, Purdue University; Otologist, Rhinologist and Laryngologist to City Hospital, St. Vincent's Hospital, and City Dispensary, Indianapolis. etc. 595 pages, 160 illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut street. 1906.

This very handsomely gotten up little vo'ume should be read by every practitioner as well as by every medical student. The sty'e and arrangement are clear and terse; but the thirty-three chapters are not thoroughly covered by the seventeen pages of double column index. The illustrations are good. The first chapter gives the embryology of the ear, nose and throat; the next three their anatomy and physiology, with those of the accessory sinuses; the sixth is devoted to bacteriology and pathology; then come Methods of Examination, Special Instruments and Therapy, Superheated Air. Solutions, Vapors and General Therapeutics. The various diseases follow with their complications, treatment and operations. Space is saved and confusion avoided by giving only such treatment and operations as the author has, from personal observation, found most successful.

As an instance of how up-to-date the book is, the submucous window resection for deviation of the septum nasi is recommended and described, while only sufficient attention is paid to the Asch operation for the reader to obtain an intelligent idea of it.

Spurs on the septum are "presumed" to excite reflex disturbances; the only way to settle the question in a given case is by its complete removal. "They should never be cauterized for fear of subsequent ulceration and thickening."

For local treatment of the air passages Dr. Kvle seems to prefer the nebulizer to the atomizer because stronger solutions may be used. We consider it preferable in treating the larvnx and trachea because the finer particles of the vapor are less irritating, other things being equal. "The oil spray, if used for a great length of time, may fill the g'ands of the mucous membrane, bringing about a functional and structural alteration."

In speaking of the chorda tympani nerve the statement is made that its "sensory fibers are vaso-dilators." evidently referring to those which go to the submaxillary ganglion; in the next edition we hope to be told what vessels they dilate, and it would be of practical interest to speak further of the function of those fibers distributed to the tongue, as well as of the nerve tract which causes the laryngeal cough reflex from irritation in the external auditory meatus by cerumen, etc.

Twice on page 26 is the stapes spoken of as the "stapedius." In the chapter "Bacteriology" no mention is made of the necessary magnifying

power of the microscope.

There are no bacteria in the normal middle ear, presumably none in the trachea of a healthy person, and "the larynx is freer from bacteria than any other portion of the upper respiratory tract." In the nose, mouth and pharynx may be found the bacilli of tuberculosis and of diphtheria, the streptococcus pyogenes, staphylococcus pyogenes aureus, and the diplococcus of Fraenkel and Weichselbaum, each or all in a latent of innocuous state, but liable at any time to become poisonous if there be a so'ution of continuity in the mucous membrane or if there be a lowered vitality of the tissues.

We are glad to see that the author believes that not only the quantity but the quality of Waldever's ring is important; he says, "a partially enlarged and diseased tonsil should be removed on account of its deleterious effect on the Eustachian tube and pharynx." We also endorse his advice to retain the nasal splint for a month after the Asch operation; too many rhinologists—or rather operators on the nose—in order to cater to the patient's desire for comfort and to their own ambition for a rapid cure, remove the splint too early and thus permit a return of the deformity. In giving the operations upon the antrum of Highmore the one usually and originally known as the Desaulte operation is called the Kuster.

The book is printed on a fine, thin non-transparent paper with clearcut type, and bound in a flexible morocco cover with gilt edged pages, an ornament to any book case, and small enough for the overcoat pocket.

OPERATIVE OTOLOGY. Surgical Pathology and Treatment of Diseases of the Ear. By CLARENCE JOHN BLAKE, M. D., Professor of Otology in Harvard University, and HENRY OTTRIDGE REIK, M. D., Associate Professor in Ophthalmology and Otology, Johns Hopkins University. Folio, 360; full page plates, 13; illustrations, 40. New York and London: D. Appleton & Co., 1906.

This volume gives a full but concise consideration of only those diseases of the ear and its adnexa which are amenable to surgical treatment, such as anomalies, tumors suppurative inflammations, etc. A very instructive and important chapter is that on "Antiseptic Technique." which includes useful directions regarding the administration of

different anæsthetics. The descriptions of the operative procedures are made very clear by the well selected illustrations, which are mostly from the author's collection. A valuable appendix includes, among other items, a description of an "algesimeter," which is a modification of the combined piezometer and algesimeter originated by Dr. Howard A. Kelley; a description of the latest improved Galton's whistle, as modified by Burkhardt-Merian and Edelmann, and a cut with directions for use of a facial nerve protector invented by Dr. Julien Bourgnet. We regret it has not better filled the apparent gap in our literature, that of the post-operative care of operations in this region. As a whole, it is an excellent book for the special student.

Polk's Medical Register and Directory of North America. Ninth Revised Edition, 1906. R. L. Polk & Co., Publishers, Detroit, Baltimore and Chicago. Price, \$10.00.

This comprises practitioners' names, addresses, etc., aranged alphabetically and according to locality; lists of hospitals, medical societies, existing and extinct medical colleges, boards of health, boards of medical examiners, medical journals, etc., with their principal officers, official lists of officers of the medical departments of U. S. Army and Navy, laws of registration and other laws relating to the profession.

Every one of us is apt to be asked by a traveling or removing patient

for the name and address of a doctor in the new locality.





# The Homeopathic

# Ege, Ear and Throat Journal.

Vol. XII.

Lancaster, Pa., and New York, Oct., 1906.

No. 10.

## EDITORIAL.

SPECIALISTS' COMMISSIONS, DIVIDING THE FEE.

Nour August issue (page 274) Dr. Woodburn asks to hear from others upon this subject; he considers it "not only proper but eminently fair" to divide fees under certain conditions: "When I am called into the country to do any operation where the aftertreatment and care of the patient is left in charge of the attending physician and where such care and after-treatment is quite as responsible for the successful outcome as the operation itself, and where the circumstances of the patient will justify, while the attending physician can only charge so much per visit without regard to the responsibility he must assume, I consider it only proper to make sufficient charge to divide with the attending physician, not upon any definite percentage basis, but according to the equities of the individual case, and I do not consider it any injustice to the patient in doing so."

We wish to protest in no uncertain tones against commercializing the profession! Even so plausibly as this.

One must have ideals (the higher the better) and try faithfully to live up to them; to the extent that we succeed or fail in this will our influence be uplifting or degrading. Every reconciling truth is a higher truth; we must not allow the immediate case or our own surrounding temptations to have undue influence, but must obtain perspective in order to decide wisely.

The only safe and logical place to draw the line against feticide is to draw it against measures for the prevention of conception.

Of course, the views quoted above are a sincere effort to be just, but they should be weighed by the principle involved, by the highest good of the profession.

If the above, suppositious, case is warranted where can the line be drawn between it and the threat by an oculist to drive out of business an optician who refuses to accede to his demand for 60 per cent. commission on all his prescriptions? Will any one defend the last mentioned practice? Does any one dare deny that it actually exists? Are we proud or ashamed of such a moral turpitude among members of the medical profession? Our conduct surely will never be any higher than our ideals.

What think you, reader, of a physician telling you to charge such and such a fee to the patient he is bringing you and to give him half?

The exclusivist may plead that he is dependent upon the general proctitioner for his practice, and that competition is so intense that he must resort to commissions, especially as he can not return the compliment by sending patients in return. In that case the exclusivist is lowering himself and his profession to a mere money grabbing trade.

Let the exclusivist convince the general practitioner and the patient that he will give the best professional care and judgment; it is also legitimate to cultivate social relations and personal friendships which may properly induce the general practitioner to favor him above other specialists.

We will be glad to publish correspondence on both sides of this question, and hope to stimulate a strong ethical fee'ing against this demoralizing practice which has so insidiously crept into our ranks.

Belladonna in the Nose and Throat. Clinical suggestions.—The beginning of a cold, during the dry stage. Secretions scanty. A sense of fulness and stuffiness. Headache Voice rough and raw. Throat irritable and scrapy. At times tingling, sneezing and nasal irritation.

The reactionary stage following a cold or an influenza attack. Parts inflamed and dry. Secretions tough and tenacious, clinging to the mucous membrane. Voice rough and relaxed. Tendency for dust to dry on the septum and form scabs and excoriations.

Atrophic rhinitis and pharyngitis. Extreme dryness of parts. Glazed appearance with tenacious mucus, which is removed with difficulty. Nose much reddened, with roughness and nasal sound to the voice. Discharge scanty and free from odor. Nose bleeds on slight provocation. Dryness in the nasopharynx extending into the Eustachian tubes with crackling sounds on swallowing and vawning.

#### THE ARTIFICIAL RIPENING OF CATARACTS.

CHAS. M. THOMAS, M. D.,

# Philadelphia, Pa.

THAT can be done to shorten the period of waiting for relief in those partially blind from cataract, is a question which I think deserves consideration and discussion.

We are too apt, in cases of immature cataract, in our desire to secure the highest per cent. of clean successes, to bow our patients out with the direction, "Wait till your cataract is ripe," without sufficiently considering the pitiable state of semi-darkness in which they must, remain during that time.

Under ordinary or even favorable conditions the patience of the victim may often be sorely tried before the period of election is reached, as is shown in a report made some years ago by St. John Roosa of ninety-seven cases of cataract, in which the average time from the incipiency of the cataract to its maturity was about four years. During this time vision is, of course, more or less reduced, and in case of double cataract the patient is over a varying period practically blind.

I have no new suggestion to make as to means for earlier restoration of vision in these cases, but desire simply to bring up for discussion the two questions: (1) Shall we operate before maturity; or: (2) shall we attempt to bring about the stage of maturity by artificial means?

I need not say that the stage of complete opacification is the ideal one for cataract extraction, as it is then that the cortex is most easily and completely removed from the capsule and recovery secured in the shortest time and with the least risk to the eye; but we must also bear in mind that even under the most favorable conditions of maturity (unless the lens be removed in its capsule) cortical masses are often unavoidably left behind in such quantity as to interfere with the immediate visual result, and to require a long time for absorption: and during that time they may more or less endanger the integrity of the eye. And this is naturally still more likely to occur when the attempt

is made to extract in the stage of immaturity, when the sticky cortex is less easily removed and the clear lens portions likely to escape detection.

The most important risk, then, in cataract extraction, as carried out at the present day, lies in the leaving of masses of cortex within the eye.

If this be so, I do not see how we can safely or consistently accept without qualification the proposition of certain operators to extract in the stage of immaturity.

On the other hand, if it be possible to safely produce an artificial maturation in even a moderate percentage of cases, I believe it our duty to make the attempt.

It is claimed by those who would operate without waiting for maturity that (1) any method thus far presented for hastening the ripening is attended by risk of complicating the subsequent extraction by displacement of the lens, setting up inflammation of surrounding structures, etc., and (2) that the maturation is so seldom accomplished as to make the procedure hardly worth while.

To this might be replied that while some of the earlier methods of ripening were distinctly dangerous, and that accidents have been reported even from the more recent methods, they are now certainly rare and almost surely avoidable, and that good results, while not uniformly secured, are fairly constant in properly selected cases.

On the other hand, we must admit that there are cases in which attempts at artificial ripening are seldom if ever successful, but where the lens may be removed with fair results even when it is partially clear. (Sclerosed lenses of old people.)

The position of him who would expect results in all cases from artificial maturation is as untenable as that of him who would indiscriminately operate in the stage of immaturity.

It appears to me that the answer to our question is that the period of waiting in semi-darkness may be shortened in practically all cases by either producing an artificial maturity, or by the removal of the cataract before it is ripe, the choice of each procedure depending upon the character of the case.

Speaking from my own experience I should say that while some cataracts are most unlikely to be affected by efforts at ripening, the risk of causing damage in the attempt is so slight that practically noth-

ing is lost by making the effort, and we are sometimes agreeably surprised at the results, and, as personally, I uniformly do a preliminary iridectomy, which is part of the Foerster method of ripening; I advise and practice ripening in practically all cases of immature cataract.

The cases which I have found least likely to respond to maturation are those of apparently purely nuclear opacity, particularly where occurring in myopia; secondly, star shaped polar opacities in the posterior cortex, and finally, the dull amber or mahogany colored lenses in the very old people. The last class furnished the cases most favorable for extraction in immaturity.

The lenses with light grey opacities and broad stripes, the sectors of opacity with oyster shell sheen and clear or dotted spaces between in the anterior cortex, and the ordinary mixed nuclear and cortical opacities almost invariably ripen rapidly following massage of the lens, and, on the other hand, are most difficult to remove completely while unripe.

Personally, I have had but little experience with any method of ripening other than that of Foerster.

The operation in itself is very simple, consisting in the performance of an iridectomy followed by trituration of the lens with a small spoon or squint hook through the depressed cornea. I have found it important to observe the following points in carrying out the procedure, premising that before attempting it the eye be free of inflammation, the pupil dilatable and the zonula sound:

- (1) Dilate the pupil and keep it so for eight to fourteen days after operation or till the eye is quiet.
  - (2) Make a moderate iridectomy (not small) extending to periphery.
- (3) Use for trituration a spoon with prominent bowl, such as a chalazion scoop or a squint hook.
- (4) Rub the depressed cornea circularly and well inside the pupillary area to avoid bruising the iris.
- (5) Keep surface of cornea moist to prevent damage to corneal epithelium.
- (6) Make sure that anterior chamber is free of aqueous in order that the cornea during trituration may come in direct contact with lens.

I may say that in favorable cases a carefully done Foerster will often produce complete opacity inside of a fortnight.

1825 Chestnut Street.

## DISCUSSION.

J. H. Payne: My observation of the various operations for ripening or maturing cataract in the clinics of Europe has made me skeptical of their efficacy, and has deterred me from attempting them, so that my personal experience has been a limited one. Whatever preliminary iridectomy I have resorted to has not seemed to induce hastening of the ripening process as far as I have been able to judge, yet here one is confronted by the fact of the erratic course of cataract formation and its liability to sudden awakening into activity after years of dormant repose. The only positive results that can be secured I believe to be induced by the needling operation, but here again one must take the risk of violent reaction, and posible cyclitis and complications that scarcely pay for the risk.

No topical application of drugs seems to serve the purpose, although one might reasonably suppose that such drugs existed, although undiscovered, as some advance has seemed to have been made—if we can credit the testimony of competent observers—toward the clearing up of incipient cortical opacities by local applications. In lieu of anything definite to offer in this line I beg you to allow me to call your attention to the growing confidence of certain specialists in the safety and desirability of extraction of immature cataract in its capsule through a large corneal flap. You are doubtless familiar with the published reports of extraction in the capsule of a large series of cases by Major Henry Smith, of India, and of his remarkably favorable results often under unfavorable conditions of asepsis. His experience of this operation has extended to nine thousand cases, which were all combined with iridectomy. He excludes only as unsuitable "cataract in children," "atrophic" and the "semi-gelatinous" varieties.

In the few cases in which I have tried it—mostly in the mature nuclear variety, but in one case of high myopia and luxated lenses that was especially gratifying in result—I have been much astonished and pleased with the small degree of reaction, the clear pupil and prompt healing. There having been no cortex left behind to serve as an irritant may account for it, for the healing process was certainly clean and prompt in them all.

I hope to be able to put the test to a further proof in a series of cases.

R. S. COPELAND: In the great majority of cases I do not make a preliminary iridectomy on account of the added danger of a second operation to the eye. I feel that every operation upon the eye is attended with a certain degree of risk of infection, and that risk in preliminary iridectomy and subsequent operation for cataract is twice as great as it is if you operate but once. In persons sixty years old I prefer to try to extract the immature cataract rather than to make a preliminary iridectomy with the view of hastening its ripening. I was

pleased to hear Dr. Payne in his discussion advise extraction in the unopened capsule; I make the extraction in that way whenever possible. A few years ago I did not dare to do it on account of the fear of loss of vitreous. As I have explained at previous meetings of this society, I no longer dread that. I always include in my preparation for the operation a sterile hypodermic syringe loaded with normal salt solution; the use of which has been so successful in my hand that I am not disturbed greatly by loss of vitreous. It is in people under fifty that I resort to the artificial ripening of the cataract.

E. J. BISSELL: One point I was glad to hear employed was that with our present technique loss of vitreous and prolapse of the iris are not so much to be dreaded, or as likely to occur, as that some portion of the lens substance might remain within the eye. Two factors must enter into the question of the maturity of a cataract,—its opacity and the age of the patient. A cataract entirely opaque in a patient fifty years of age is more difficult to remove without some soft lens substance remaining than one only partially opaque in a patient seventy

vears of age.

Therefore, the age of the patient largely influences me in the advice I give my patient and the method I pursue in operating. Irrigation for soft and immature cataracts is coming more and more into favor.

JOHN L. MOFFAT: Would there be any danger in trying to artificially ripen cataracts by the use of drugs? We know that naphthalin has caused cataract; has it ever been tried for the purpose of hastening the ripening? Would it cause other troubles if pushed to this point? As to the question of removing every particle of lens tissue, has fluorescin ever been instilled into the anterior chamber in the endeavor to make the remnants more visible? Does it do any harm used in the interior of the eye? Would it be worth while and safe to try? Nothing has been said of vibratory massage. Has any one present observed any effect whatever from this upon immature cataract?

One or two have spoken of removal in the capsule if the patient is under fifty, and some have put the age as late as seventy. Some say it depends upon the strength of the zonula; how do you know the zonula

is strong until you try?

I want especially to make a plea for consideration of the patient's feelings and the effect upon his health of an unfavorable decision.

One should not tell the patient that he or she is too o'd for cataract extraction. Some other operator may not think so. I have seen the patient lose vitality and health solely from such a dictum, depriving him (and her) of any sustaining hope during the more or less gradually failing vision. A case in point: I have now a patient eighty-seven years old who was very vigorous, active and intelligent, a rugged old lady. A partial cataract in each eye impaired but did not deprive her of the power of reading. About a year ago an oculist told her bluntly that she was too old to be operated upon. The shock,

I think, hastened the visual failure, and as she has more and more difficulty in reading she has less to live for, takes less interest in life

and has aged ten years in one.

I had a hale and hearty great uncle, ninety-five years old, with a partial cataract like a finger reaching the center of the lens. In those days such an eye was considered inoperable. When he lost his sight instead of being a man in active business, he simply had nothing to do and went home and died. I am satisfied that with our present knowledge he could have been successfully operated and added quite five years to his life.

Age should not be measured by years but by the arteries, genera!

health, habits and temperament.

W. R. King: As to the advisability of a preliminary iridectomy I will state that I do the operating both with the preliminary iridectomy and without it. In other words, I do not have a fixed rule, I endeavor to use judgment. My first experience that taught me it was not always advisable, was in the case of a patient who was of so marked a rheumatic disposition that I had to fight a violent iritis before extraction could be performed, the traumatism of an operation in one with such a strong predisposition to rheumatism was probably the cause of the violent inflammation. After that I made it a rule to endeavor to discover my patient's tendencies before operating. Where the case is suitable I am inclined to agree with Dr. Thomas. I believe the preliminary iridectomy is then advisable. When you have done the iridectomy you have performed the major portion of the operation so far as pain or shock is concerned, and you have got your patient in a state of mind where the operating table is not so greatly dreaded. They go to the second operation with more alacrity than to the first; the major traumatism has been effected, and the second operation is less of an ordeal to the patient. This method of artificial maturation I think presents the most practical and least harmful method of any that has been devised or described.

Like Dr. Moffat I do not consider the age of my patient in years so much as the physicial condition at the time. The most successful result I have had in cataract extraction was in a lady of eighty-two. She is now over eighty-seven, and seems no older than a woman of sixty. She has enjoyed the use of her eye ever since the opration, and there occurred no complications during or after the operation.

R. S. COPELAND: Do you ever have an attack of keratitis following

the operation?

DR THOMAS: In regard to keratitis, I have never seen such a thing happen after this operation, and can hardly imagine it would be possible, even though the superficial layer of cells were displaced. Of course, the finger must be aseptic.

With reference to the preliminary iridectomy I have only to say, as I have said before, the strongest argument is the argumentum ad hom-

inem. Would you, if you had a cataract, prefer to have it extracted or the capsule or by preliminary iridectomy? I believe there would be only one answer to that.

Where there is only one eye, we all agree that extraction in the capsule is to be avoided. We are chary, in such a case, of the simple extraction or by the combined method; it seems to me there are few dissenting views as to this. If that is so, why not give those who have two eyes the same chance?

Cresol, or Cresylic Acid,  $(C_7H_8O)$ , is a derivative of coal tar or wood tar. There are three varieties, the ortho, meta and para cresols. Cresol is obtained from the oily mother liquor left after crystallization of the phenol by dissolving in caustic soda, removing all naphthalene by a current of steam, and then fractionally precipitating the solution with hydrochloric acid; the cresol separates out first, the phenol remaining in solution. The cresol obtained is purified by distillation until it boils at 198°-203°. Derivatives of all three cresols can be prepared from it. The three isomeric cresols exist in coal tar approximately in the proportion of 35 per cent. of orthocresol, 40 per cent. of metacresol, and 25 per cent. of paracresol.

According to Nordlinger, the three modifications of cresol may be distinguished by their behavior with ammonia. When a few drops of orthocresol are shaken with a few cc. of ammonia solution the mixture becomes bluish on standing, like a dilute solution of cupric sulphate; but after a few days it acquires a deep indigo blue color and becomes opaque. Paracresol when treated similarly gives a transparent yellow liquid. Metacresol also gives a transparent liquid which at first has a faint steel blue color, afterwards becoming bluish, but the tint is dis-

tinguishable from the deep indigo yielded by orthocresol.

Nordlinger states that orthocresol is less poisonous and corrosive than its isomers; also that it is more potent as a germicide than the meta- or paracresols. A one per cent. aqueous solution of orthocresol is not decomposed or rendered turbid by acid or neutral salts, does not affect the skin or render the hands slippery or numb, and has no action on metals. Solutions containing 0.25 per cent, to one per cent, have an antiseptic power equal to solutions containing from 2 to 5 per cent. of pheno!. Most authorities claim, and thorough tests prove indisputably, that the orthocresol is the least caustic, least poisonous, and yet most potent as a germicide. Many compounds of cresylic acid have been placed on the market and at the disposal of the profession. Upon analyses it has been found that practically all of them contain the metacresol as a base. The metacresol is the most caustic and poisonous of the trio, also the least potent as a germicide, but it is that form most readily obtainable, for the reason that the ortho- and para- forms are largely used in the aniline industries and as a base for the synthetic bui'ding up of other products.

# THE SENILE EYE AND THE ARTERIO-SCLEROTIC EYE.\*

## MONS. VENNEMAN,

## Louvain, France.

HE senile eye is to the normal eye as is the aged man himself to the healthy adult; an organism impaired anatomically and physiologically.

The primary cause of the shrinking of the body and of the eye in the old person is a diminution in the quantity of blood with traverses the arterial canals. This relative anemia makes the tissues drier, less turgescent and less capable of physiological function. It also partially empties the serous cavities, habitually better filled with a serum of higher osmotic potential.

The senile eye, although less yielding to the first touch of the finger, is, nevertheless, softened; the pupil is small; the anterior chamber almost effaced.

The three noble tissues of the animal organism—the muscular, nervous and glandular—suffer especially from senile ischemia. We have presbyopia from insufficiency of the muscles of accommodation as well as from dryness of the crystalline lens, lowered vision because the retina functionates poorly and because the intra-ocular vasomotor reflexes, are defective, and the pigmentary epithelium of the choroid, which secretes the visual chromatins, becomes pale, and the fundus presents a honey combed appearance. The serous filtration through the ciliary epithelium suffers in much the same way, impairing the nutrition of the vitreous and the crystalline. The fibers of the lens, above all, having preserved something of the neuro-epithelial nature that they possess in the cutaneous eye of invertebrates, are more readily disorganized, and cataract ensues. Whenever muscular tissue—the active, elastic element of our animal life—disappears there appear, to replace it, elastic networks of a rather mechanical value and passive

<sup>\*</sup>Translated from the Annales d'Oculistique, by John L. Moffat, M. D.

function. In the same way we find tissue filling in the place left by the nervous elements manifestly diminished in volume; solid neuroglia in the retina, fibrillar tissue in the nerves.

In the meshes of rich vascular network, such as one finds in the iris, in a part of the ciliary body and in the choroid, the substitutive conjunctive tissue is mucous, in the adult. In the aged, whose vascular networks lack turgesence, mucous tissue is changed into fibrous; this explains senile sclerosis of the iris, ciliary processes and choroid. The color of the iris becomes pale and turbid, the margins of its crypts obliterated, and all the normal reliefs of its anterior face disappear. The iris, although thinner and more fragile, is more dull and less transparent. The grayish track of its large radial vessels is readily seen, for the arteries and veins have really much thicker walls than in the adult eye; not because their tunics are inflamed or hypertrophied, but because the smaller column of blood permits the display of the side of the lumen of the canal. (Parce que la diminution de la colonne sanguine a permis leur étalement du côté de la lumière du canal.) At the same time these tunics, ill nourished by a less generous blood, undergo hyaline degeneration.

In the senile eye there is then nothing which resembles true arterio-sclerosis. But many old people are arterio-sclerotic, and their eyes may be so, like their heart, or their brains, or their kidneys, or their liver; that will depend upon circumstanecs, above all upon their manner of living.

As to the arterio-sclerotic eye, this is also an ischemic eye—as is the senile eye—but here the ischemia is pathological; the anemia finds its explanation in a constriction of the arterial canal due to obliterative endarteritis which itself is a result of an infection or a chronic intoxication of the blood.

In the vessels with diseased walls the blood no longer finds the space that it should be able to fill; as the blood preserves its volume and ordinary tonicity, the arterial tension rises and soon passes beyond normal, hence compensatory hypertrophy of the arteries and enlargement of the capillaries.

In the ophthalmoscopic picture the arteries have white lines, become tortuous and pulsate synchronously with the pulse; the capillaries dilate and break: there are, therefore, hæmorrhages before the phenomena of atrophy and degeneration of the senile eye occur.

As to the degenerations, they do not stop at the hyaline form, they

become fatty with white plaques in the retina and brilliant crystals of cholesterine in the vessel walls or on the filaments of the vitreous.

The hæmorrhages are capillary; their seat in the retina proves this. I can not yet say whether this is always by simple rupture from the already elevated arterio-sclerotic pressure of the blood, or if the blood pressure must previously be increased by complete obliteration of a certain number of capillaries or by thrombosis of a more important vein.

There are two arterio-scleroses: diffuse and circumscribed.

Diffuse arterio-sclerosis extends along the arterial trees of entire viscera. If the eyes are attacked at the same time as the kidneys we will diagnose albuminuric retinitis. If the eyes are involved together with the heart or the brain we diagnose embolism or thrombosis of the central artery of the retina; but embolism is rare and the thrombosis itself is a complication. If the eyes are affected contemporaneously with the liver we diagnose an atrophic choroiditis.

Thrombosis of the central vein of the retina does not count here; it is an acute endophlebitis, it is the phlegmasia alba dolens of the eye. Only glaucomatous pains come on slowly, because of the feeble influence which the retinal vascular system exercises upon the nutrition of the vitreous. Thrombosis of the central vein of the retina occurs—outside of all arterio-sclerosis—in infectious blood dyscrasias; in the decline and during convalescence from microbic diseases. I have encountered it at all ages, from 23 to 74. That it complicates a prior arterio-sclerosis at this advanced age is not astonishing.

The hæmorrhages of septic retinitis are likewise independent of all arterio-sclerosis. Certainly glaucoma does not depend exclusively upon ocular arterio-sclerosis.

As to circumscribed arterio-sclerosis—arterio-sclerosis in plaques—it does not attack arteries of such small caliber as that of the branches of the central artery of the retina.

Retinitis circinata characterizes this exceptional localization. The trunk, only, in its passage of the sheath of the optic nerve and before entering the interior of the eyeball frequently shows sclerous plaques. Upon these a blood dyscrasia, infectious, intercurrent, hyaline thrombus may settle; most often this is necessary to complete the obliteration of the blood vessel. Finally, it is very necessary to avoid confounding with diffuse or circumscribed arterio-sclerosis, syphilitic and tuberculous arteritis; these bear a close resemblance to it anatomically, and consequently present the same clinical symptoms.

True arterio-sclerosis is a chronic inflammation of the intima. When the media participates in the sclerosing inflammation and the consecutive degeneration, it is already atheroma. When the adventitia and even the surrounding tissues are comprised in the inflammatory focus the terms arteritis and periarteritis should be employed, for which a much more diffusible phlogogenous principle is necessary than that which produces arterio-sclerosis. The syphilitic virus and the tuberculosis toxins possess this great diffusibility and this phlogogenous power intensely enough, at the produces arterio.

Gradually Increasing Hoarseness in people past middle age without definite cause, and with a history of pain radiating to the ear, is suggestive of malignancy.—Am. J. of Surg.

JUL 19 1912

Acetozone or Benzozone. A benzoyl acetyl peroxide (C<sub>6</sub> H<sub>5</sub> CO. O. O. CO. C. H<sub>3</sub>), which forms stable crystals fusing at 40° C. This preparation consists of a mixture of the pure peroxide with an indifferent substance and may be used directly as a dusting powder or in ointment form. Aqueous solutions of Acetozone or the pure peroxide readily split off nascent hydrogen peroxide, and it is claimed that the latter, in 0.01 per cent. solution, destroys the most malignant forms of bacteria.

Euphthalmin is a synthetic product, it is used in solutions of 2 per cent. to 10 per cent. It dilates the pupil and paralyzes the muscle of accommodation; the eye regains its normal tone in five or six hours; there is no pain or redness; it is not an irritant. It has not produced constitutional symptoms in Dr. J. M. Ball's hands, although he has used it freely in children and delicate females. In the examination of the eye with the ophthalmoscope, and in the correction of errors of refraction by retinoscopy, he is using Euphthalmin almost exclusively; a patient's refraction may be measured late in the afternoon, and he will be able to write the next morning, or even late that night. children use a 5 per cent. solution, and in adults one of double this strength. After the use of two drops three times at intervals of five minutes one can examine the fundus with satisfaction or make use of retinoscopy. In cases of iritis and other inflammations needing mydriasis probably nothing will supersede atropin, when prolonged mydriasis is required.

# PROCEEDINGS OF THE NINETEENTH ANNUAL MEETING OF THE AMERICAN HOMŒOPATHIC OPHTHALMO-LOGICAL, OTOLOGICAL AND LARYNGOLOGICAL SOCIETY, HELD IN ATLANTIC CITY, SEPTEMBER 11-14, 1906.

President John B. Garrison called the meeting to order Tuesday, at 2:30 P. M., in the Hotel Dennis, and appointed as Committee on Attendance: H. W. Hoyt and G. A. Shepard; as Committee on Press, Wm. Rufus King and H. S. Weaver.

The program as printed was adopted, and the privilege of the floor was extended to all visiting physicians.

Dr. Hubbard's paper exceeded the time allowed, and an extension of time was granted on motion of W. R. King.

SECOND SESSION-8 P. M., SEPTEMBER 11TH.

Called to order by the President at 8 P. M.

W. R. King moved that the regular order of the program be suspended, and that the President's address be heard now. Voted.

Vice-President H. S. Weaver appointed as committee on President's Address H. D. Schenck, Geo. Rhoads and E. W. Beebe.

On motion of W. R. King the report of this committee was made the first order of business to-morrow evening.

#### REPORT OF THE SECRETARY.

Mr. President and Fellow Members:

I herewith submit my second annual report as Secretary of this Society.

We have enrolled one hundred and seventy-five active members. A strenuous effort has been made to get each member to state what his specialty is, and if he practices exclusively as a specialist or if he combines general practice. I am happy to say that the present list contains but one x indicating that no answer has been received.

The Secretary's attention was called to some cases where a man was put down as practicing "exclusively" who was also a general practitioner, and, upon inquiry, these errors have been corrected. Undoubt-

edly others exist, of which the Secretary should be notified. The importance of knowing these facts when one refers a patient to a confrere in another city is too evident to need to be enlarged upon.

At our last meeting the Secretary was instructed to notify those who are not members of the Institute when their three years shall have expired. Of our fifty-nine members who are not also members of the A. I. H., forty-six joined prior to 1903.

The matter was referred to President Garrison, who agreed with the ruling of ex-President Copeland, that the amendment could not be retroactive, that is, could not be applied to those who joined our society before this requirement to join the Institute was passed. This reduced the number to seven who joined us since June, 1901. They are:

Dr. W. C. Cook, Pittsburg, Pa.

Dr. W. B. Croft, Medina, O.

Dr. C. H. Gilbert, Rushville, Ind.

Dr. J. F. Roe, Binghamton, N. Y.

Dr. C. H. Rust, Cleveland, O.

Dr. J. H. Shaw, Plymouth, Mass.

Dr. E. B. Woodward, Lincoln, Neb.

These were accordingly notified.

Drs. Gilbert and Shaw agreed to join this year. Dr. Woodward declined, from the others no reply has been received.

In this connection I present the resignation of Dr. Chas. G. Fuller, of Chicago. He gave no reason, but fearing it might be on account of the A. I. H. clause, I wrote him of the ruling that the provision could not be retroactive, and, therefore, did not apply to him. To this I have no reply, so his resignation stands and must be acted upon.

In the transactions of this year an innovation was introduced in publishing a list of members present at the annual meeting. I would suggest that this be continued as a sort of roll of honor. To guard against omission every one should register with the Committee on Attendance. At the suggestion of ex-President Schenck, and with the approval of President Garrison, copies of our transactions, 1900-'05, inclusive, were sent to the following libraries:

Boston Medical Library.

B. U. S. M. Library.

Library of Medical Society of the County of Kings, Brook'yn.

N. Y. Eye and Ear Infirmary.

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University of Michigan.

University of Iowa.

New York Homœopathic Medical College.

Hahnemann Medical College, Chicago.

Hahnemann Medical College, Philadelphia.

Cleveland Homocopathic Medical College.

Maryland State Homocopathic Society, Baltimore.

From all of these very courteous acknowledgment has been received.

Cochran, the publisher, has now 'on hand:

13 copies of 1900.

11 copies of 1901.

28 copies of 1902.

32 copies of 1903.

35 copies of 1904.

66 copies of 1905.

If the coming administration or the society approve of this disposition of the transactions, members should notify the secretary of medical libraries in their respective cities which have been omitted.

I would also suggest that new members be offered these volumes at a nominal price.

#### Respectfully submitted,

DAVID W. WELLS.

Adopted on motion of H. D. Schenck.

On motion, duly seconded, C. G. Fuller's resignation was accepted.

#### REPORT OF THE TREASURER, SEPTEMBER 11, 1906.

Balance on hand at last report\$263.71
Eght new members 40.00
Dues 479.00
\$782.7I
Stenographer at Chicago\$100 00
Correcting discussion 6.00
Printing for the Secretary 71.00
Stamps for the Secretary 13.50
Stenography for the Secretary 35.00
Printing for the Treasurer 22.25
Stamps for the Treasurer 11.00
Bank discount for the Treasurer 3.30

# PROCEEDINGS OF THE NINETEENTH ANNUAL MEETING. 349

Stenography for Dr. R. S. Copeland	
Official button for the Society 45.00	
•	
Publishing and delivering Dr. Schenck's article on	
Quinine 45.17	
Printing and delivering Transactions 171.01	
	578.61
Cash on hand	\$204.10
G. DeWayne Hallett, <i>Tre</i>	asurer.

President Garrison appointed as Auditing Committee: H. D. Schenck, G. W. McDowell and C. Gurnee Fellows.

REPORT OF BOARD OF CENSORS.

The following twenty were recommended for membership and du'y elected:

John F. Beaumont. 1440-42 Madison St., Chicago, Ill. 1877.

Henry Bierman, 38 West Fourth St., Bloomsburg, Pa. 1888.

Joseph Harker Bryan, 221 Asburk Ave., Asburk Park, N. J. 1890.

Robert J. Ferguson, 29 College St., New Haven, Conn. 1899.

Horace S. Furman, 1705 Tioga St., Philadelphia, Pa. 1888.

George Christian Haller, 4564 Wayne Ave., Germantown, Philadelphia, Pa. 1897.

George Henry Hass, 121 N. 8th St., Allentown, Pa. 1887.

Llewellyn Evans Hetrick, 531 Cookman Ave., Asbury Park, N. J. 1898.

Howard Ivins, 307 East State St., Trenton, N. J. 1899.

Robert Mortimer Jones, Hotel Longacre, 161 W. 47th St., New York, N. Y. 1806.

Theodore H. Lemmerz, 141 Magnolia Ave., Jersey City, N. J. 1896.

Mary Louise Lines, 285 Washington Ave., Brooklyn, N. Y. 1884.

E'lis Gregg Linn, 300 N. Main St., Mt. Pleasant, Iowa. 1889.

William Clark McKnight, 219 W. 135th St., New York, N. Y. 1901.

Charles E. Myers, 170 Green Lane, Manayunk, Philadelphia, Pa. 1889.

Charles E. Paine 640 St. Marks Ave., Brooklyn, N. Y. 1903.

Robert L. Piper, 1225 Logan Ave., Tyrone, Pa. 1892.

Ralph W. Reynolds, 810 Rose Bldg., Cleveland, O. 1902.

Otis D. Stickney, 922 Pacific Ave., Atlantic City, Pa. 1902. Robert Lippencott Walter, Walters Park, Pa. 1900.

REPORT OF COMMITTEE ON DRUG PROVING—CHAIRMAN, DR. H. P. BELLOWS.

H. P. Bellows: It is with devout thankfulness that I report the work of the Committee on Drug Proving of this society, instituted six years ago, as at last fully completed. The book which I hold in my hand is the permanent record of the work which we have accomplished. It was published last week and is now being distributed.

Its size may be a surprise to some of you who have not seen it before; the reason of its somewhat bulky appearance is that all the material of our fifty-three provings is here worked over and over in the interests of the drug provers of the future. Every problem which occurred to the mind of your chairman has been worked out to the minutest detail. One mode of classifying the results we obtained is original, resting upon a physiological rather than an anatomical basis.

One point that I want to emphasize is that an extreme degree of condensation has been attained in parts of this volume. The whole subject matter is finally presented in sixteen pages. As the value of the symptoms given is indicated by a system of numerical exponents, it would be a matter of little labor to cull out those which are most important and characteristic. These latter alone could easily be printed on three or four pages, so you see that notwithstanding the bulk of the work the element of condensation has not been neglected.

This book is going all over the globe; copies, in accordance with the vote of the society, have been sent to all the homoeopathic journals of the world. I have already heard from several of these, and have promise of careful review.

It is premature to say much about the subject of subscription, because subscriptions are still coming in. Three hundred and sixty-eight have been received at five dollars per copy, the fixed price of the book. Others modified their subscription, two being received at four dollars, three at three dollars, and eight at two dollars per copy. This is the total up to the present time, but the cards are still coming in. After the reviews have appeared, your chairman confidently expects a still greater subscription will be received. Hence the financial side can hardly be presented this evening.

Aside from editorial comment, a great many letters. expressing ap-

preciation of the work that has been done, have been received. Many of these letters are from the other side of the water, where the interest seems to be greater in proportion to the number of homeopathic physicians than in this country.

There is one suggestion that I would like to make, and that is your director be empowered to enclose the manuscript of these provings in suitable pamphlet cases, at the expense of the society, and donate them to the trustees of the Institute of Drug Proving. They may be of great value for future reference, and can be easily arranged so as to be always accessible.

It was moved by Dr. J. L. Moffat, seconded and carried, that the Chairman of the Committee on Drug Proving be empowered to enclose the manuscripts in suitable pamphlet covers and donate them to the trustees of the Institute of Drug Proving.

The committee on distribution of Dr. Schenck's paper. "Quinine," reported and was discharged.

Moved, seconded and carried that report be accepted.

The following report of the Committee on Nominations was adopted, and the Secretary was directed to cast the ballot of the society:

President: Eugene L. Mann, of St. Paul.

1st Vice-President: Irving Townsend, of New York City.

2d Vice-President: Joseph H. Ball, of Bay City, Mich.

Secretary:\* Herbert W. Hoyt. of Rochester, N. Y.

Treasurer: G. DeWayne Hallett, of New York City.

Board of Censors: E. H. Linnell, G. H. Quay, J. L. Moffat, F. D. Lewis, and W. B. Hughes.

REPORT OF AUDITING COMMITTEE-H. D. SCHENCK, CHAIRMAN.

Your committee has examined the books, accounts and vouchers of the Treasurer and found them absolutely correct. On motion, adopted.

#### RESIGNATIONS.

The Treasurer read letters of resignation from A. E. Austin, E. G. Rust, and S. S. Kehr. On motion, these were adopted, in addition to that of C. G. Fuller (above).

<sup>\*</sup>D. W. Wells was renominated and re-elected, but refused to accept.

352 PROCEEDINGS OF THE NINETEENTH ANNUAL MEETING.

By vote J. L. Smith's dues were remitted and his resignation accepted.

On motion H. B. Hills, Paul Allen, and E. H. Baldwin were dropped from membership for non-payment of dues.

H. W. Hoyt suggested that we might with advantage try the following procedure, which he observed at the recent meeting of the British Medical Association at Toronto: Each member who took part in the discussion of a paper was promptly furnished with a tablet (containing suitable instructions printed on it) and a pencil, and was requested to hand to the Secretary what he had said written out. This avoided the trouble, delay and expense of a stenographer.

On motion, this was referred to the Executive Committee with power.

Adjourned until afternoon.

THIRD SESSION-WEDNESDAY AFTERNOON, SEPTEMBER 12TH.

Meeting called to order at 2:30 P. M.

Seven more papers were read and discussed. After this the minutes of the previous meeting were read and adopted.

FOURTH SESSION-WEDNESDAY EVENING.

Meeting called to order at 8 P. M.

COMMITTEE ON PRESIDENT'S ADDRESS-REPORT.

We commend the carefully prepared historical sketch by our president to our members, as almost a generation has passed since that memorable organization in the room of a member of this committee, who is still one of our active members, and probably the only living representative of this epoch-making occasion.

Your committee feels that the commendation of our president has fittingly, but perhaps inadequately, expressed the value of the reproving of Belladonna done in the name of this society. This work, which must put the name of the director of our proving among the few whose names shall ever be imperishable because of their work for the law of similars, cannot have too much said of it as a working model upon which all future provings must be based. We, therefore, recommend that this work done so carefully in our name receive the hearty support of all our members, and that in extending our thanks to the director, we realize how feebly these express the debt we owe him for

his masterly work so industriously, lovingly and carefully done. We can only hope that the appeal for the relief of suffering humanity, to which a reproved materia medica opens the way, may speedily have the support of a good samaritan ready to endow an institution especially equipped for this work. We, therefore, recommend the appointment by the chair of a committee to draft suitable resolutions regarding the work of Dr. Bellows.

The value of the increasing number of verified symptoms, which our meetings have in recent years added, should be extended and amplified with each succeeding session.

A trial of the amendment to our By-Laws requiring all members to become affiliated with the Institute before they have been members of our organization three years has not resulted in help to the Institute, and has partly nullified our efforts to increase our list of members. We believe thoroughly in commending to each member the great value of joining the oldest national medical society in the United States, but also believe in respecting the individual liberty of action of each member, and would recommend that Sec. 4 of Article 5 of the By-Laws be amended by striking out all of line four after the comma, and line five to the period.

HERBERT D. SCHENCK, Chairman: E. W. Beebe, George Rhoads.

On motion, the report was adopted.

The president appointed as that committee thus formed: R. S. Copeland, C. G. Fellows, and H. D. Schenck.

H. D. Schenck moved that Section 4 of Article 5 of the By-Laws be amended by striking out the clause extending from the word "dues" down to the word "until." Seconded. Carried unanimously.

Dr. Schenck moved that the last paragraph of Section 4 of Article 5 beginning with the words "The Secretary," down to the end of the section be stricken out. Seconded. Carried unanimously.

The rest of the evening session was occupied by the Materia Medica Symposium, and by a steropticon exhibit of pathological conditions of the fundus by C. Sheble Brown.

#### FOURTH SESSION.

# MATERIA MEDICA SYMPOSIUM.

### ACUTE RHEUMATIC IRITIS.

WM. RUFUS KING, M. D.,

Washington, D. C.

This case occurred a few months ago, and was for me a rather unique experience. The patient was an old school oculist suffering with the fourth attack of rheumatism, complicated with iritis. Every attack of rheumatism had been accompanied with this inflammation of the iris; he had treated three attacks with moderate success by making a pilgrimage to Mt. Clemens. This last attack was in March, and as usual at the first signs, he went to Mt. Clemens but failed to receive the usual relief. He reached Washington much discouraged and suffering severe pain. He soon began to have marked choroidal symptoms with scotomata, and became considerably frightened. He was a friend of one of our Washington members, and had become somewhat interested in homoeopathy, so that in that way I was called in to help if I could. I found him suffering with supraorbital and ciliary neuralgia. night he received two powders of spigelia 30. The next day he asked me. "What did it?" The neuralgia went for good. Later he received the red iodide of mercury in the 3d, every two hours. His improvement was rapid. The local treatment was dilatation of the pupil. He recovered completely in three weeks. The previous attacks had required six weeks to two months. No other remedy was given while I was treating the iritis. Later, he received rhus tox. for general rheumatism. The spigelia was not given at the same time as the mercury.

#### DISCUSSION.

E. B. HOOKER: How do you know, doctor, that the spigelia would

have gone on and cured the case? How do you discriminate between the curative work of the two remedies?

W. R. King: The spigelia was prescribed upon certain symptoms; when these symptoms disappeared, my inference was that it had done its work, and another remedy was needed for the remaining symptoms. I have never seen a more prompt effect. The homoeopathic treatment was given after allopathic doses of the salicylates and of the coal tar preparations.

#### A SULPHUR CURE.

J. B. S. KING, M. D.,

, Chicago, Ill.

M. H., 60 years old, complained of dull ache in occiput, sleepless nights and loss of sexual power. These were recent symptoms; they were not enought to select a remedy, so I cross-questioned him and elicited the fact that he had not been well for a long time, and did not care for the old ones, he wanted relief from the new ones.

I found that he formerly was troubled with hæmorrhoids, which he generally relieved by taxis whenever they came on.

Hæmorrhoids sore to touch, but rarely bleed.

Sensation of weight in anus.

Difficult breathing in warm room.

Weak and faint before eating, especially dinner.

He felt no better, rather worse, after sleeping.

He felt worse when resting, better when moving about.

Always constipated, stool passed with great effort.

At night he was restless and fussy, could not get comfortable; tossed and turned.

This was not like the cerebral activity of coffee or of cocculus, nor the drowsiness yet inability to sleep of belladonna and chamomilla. On consulting Boger's Repertory I found that sulphur covered the symptoms best, nux v. second.

This led to the question. Are you troubled with cold feet? He replied with energy that he was not, his feet were too hot, they burned, especially at night. Many years he had slept with them uncovered, even in winter. This settled it for sulphur.

I gave him a dozen powders with a dram bottle of placebo disks, and directed him to take a powder every four hours, and when he experienced a distinct relief to stop the powders and take disks instead. The result was very satisfactory and was instructive as to the order of disappearance of symptoms.

He reported next day that he had only taken two powders, because relief was experienced after the second dose.

The symptoms disappeared in reverse order of their appearance, always a good sign of permanent help.

The headache and partial impotence were gone in a week. The hæmorrhoids and their train of symptoms appeared slightly the second week, and they went for good. The sleep became sounder, and finally after a month or more he reported that his feet were vastly improved. He had several bottles of the placebo, but only the two doses of the sulphur.

#### MY FIRST CASE AND ITS CURE WITH NITRIC ACID.

J. W. STITZEL, M. D.

#### Hollidaysburg, Pa.

When the question of cases cured by drugs homoeopathically administered is mentioned, my mind invariably goes back to my first case in my student days.

While I have prescribed for thousands of patients since then, probably no case ever gave me more satisfaction.

Patient was a close friend of mine, whose knowledge of homoeopathy was limited largely to sugar pills.

He had repeatedly twitted me on the subject of homocopathy, and had tried to dissuade me from going to a homocopathic college.

I was consequently surprised to have him hail me one July morning, and say: "You know I have never had much faith in homœopathy, but I have about lost faith in the other school of medicine. Here I have had a cough since last January. I first went to Dr. M., our local physician, and getting no better after he had treated me a short time. I went to my uncle (who, by the way, was a prominent old school physician), and he has been prescribing for me for the last few months.

I also tried various cough mixtures. But during the last month I have lost about seventeen pounds, and am consequently alarmed about my condition."

He was about my height and build, weighing about 140 pounds when well, and, of course, the loss of seventeen pounds in addition to what he had lost previous to the last month meant a great deal to him.

He said: "I am afraid of consumption, and would like to get rid of this cough, and I have made up my mind to see what you can do with your sugar pills."

I had only been to medical college one year, and realized my meagre knowledge of materia medica, but thanks to Dr. Dudley I had the principles of homoeopathy pretty thoroughly instilled into me, and I was also anxious to convert this patient to homoeopathy.

I told him I would see him that evening, which I did, and on questioning him carefully I found his cough began or was caused by a burning in the right side of the larynx. Had little or no expectoration, and was much worse at night. In fact, at times during the day he would think he was going to be free from it, but as night came on it would again get much worse, and, of course, greatly interfere with his sleep.

After looking up the case carefully, with the meagre literature I had at that time, I decided to give him nitric acid.

I accordingly went to the drug store and got a couple of drops of nitric acid and made my own dilution. I made the 3x dil., and after I got through with it I felt I was not giving him anything, the amount of nitric acid seemed so small.

But I gave it to him on No. 40 pellets, and did not see him for three days, when I got the following history: After taking the medicine the next day he began to expectorate a ropy, stringy mucus, burning in larynx disappeared and slept well, and consequently felt much better.

Said he was going away for a week, and I gave him another bottle of nitric acid and also a bottle of kali bich, and told him to take the nitric acid for three days, and if he still had some of the ropy mucus to take the other bottle.

He returned at the end of a week entirely free from cough, and has never had a cough from that day to this, while previous to that time had had a cough nearly every winter.

#### DISCUSSION.

F. D. Lewis: Did he take any kali bichromicum?

I. W. STITZEL: He did not.

F. D. Lewis: I was called in to see a young man who was said to be choking to death. I found him sitting up in bed propped up on pillows and struggling for breath. He said his throat felt as if full of splinters. I gave him nit. ac. 30 in one-half glass water. Teaspoonful every half hour until better. The young man had been under allopathic treatment for two weeks without relief; there was a row of bottles on the mantelpiece as evidence of it. I was surprised to have the young man call on me the next day and ask if it was safe to go on a picnic.

# A CASE OF CORNEAL ULCER CURED HOMŒOPATHIC-ALLY.

E. D. BROOKS, M. D.,

# Ann Arbor, Mich.

May 21, 1904, there was brought to my office a little Scotch girl, Genevieve McD., six years of age, slender, poorly nourished, red hair and fair skin, suffering from corneal ulcer, for which a prominent allopathic oculist had treated her for three months with no improvement. There was much photophobia, considerable 'achrymation, sleeplessness, restlessness and irritability of temper. There were scabby sores at the angles of the mouth and nose, oozing a sticky serum. She kept her eyes hidden in her handkerchief and preferred to stav in a room with shades drawn close. Bandaging aggravated the symptoms so much that she could not be induced to wear one for more than a few minutes, when she would frantically tear it off. She was given a vial of graphites 30 and a collyrium of boric acid, and the mother advised to let her play out of doors as soon as she could bear the light, with the aid of the smoked lenses she had worn for several weeks, and report once a week. At the second visit there was a perceptible lessening of the photophobia and a decided improvement in her general appearance. This continued for three weeks and then ceased. Feeling sure of my remedy I gave her one B. of sulphur 30. At the end of another week the mother reported great restlessness day and night, a

profuse gush of tears ensued on forcing the lids apart, all the symptoms were worse in damp weather. Rhus tox. 30 was prescribed and continued for four weeks with gradual lessening of all the symptoms, at the end of which time the case was discharged as cured. The child had gained much in weight, color, appetite and general appearance, and had every appearance of a healthy girl.

The family then removed to Detroit, and in April, 1906, brought the child to me to have glasses fitted. She had remained healthy and her eyes looked well except for a slight depression where the ulcer had been. Under cycloplegia I found she required the following prescription: R. +2.75 c. axis 90; L. + 2.25 c. axis 90, which gave a vision of  $^{20}/_{50}$  with each eye. Without glasses it was R.  $^{20}/_{200}$ , L.  $^{20}/_{150}$ . She is wearing them with comfort.

No change was made in the surroundings or diet in this case as none was needed. The only adjuvant was the boric acid collyrium, which had probably been previously used by the allopathic oculist.

Possibly rhus may have been her remedy from the first, but as she made a satisfactory gain under graphites. I changed it only when it seemed to have lost its power to benefit. I did not get the symptoms of restlessness and of aggravation from damp weather until after the administration of sulphur, though I am not certain they were not there at the first. The certain prompt and permanent cure of the whole case is a sufficient justification of the prescription.

#### CAUSTICUM IN LARYNGITIS.

THOMAS L. SHEARER, M. D.,

Baltimore, Md.

The patient was a lady, æt. 45 years; she had dark hair, was stout and of a highly strung nervous organization. She had from time to time suffered from attacks of acute laryngitis with more or less oronchitis, and always placed herself under old school treatment. The attacks lasted usually, in spite of local and general treatment for six weeks to two months. During one of these she applied to me for examination and treatment. The symptoms that she most clearly out-

lined were: A hard, dry cough, with rawness in the larynx and aphonia; the cough was worse in the early morning, and was greatly aggravated by her coming from the atmosphere of the street into the warmer temperature of the room. The cough was so severe that she was exhausted (at times) almost to the point of collapse, and frequently the coughing was accompanied by entire loss of control over her bladder and the annoying (involuntary) escape of urine. At night she was unable to get into an easy position, and complained of a feeling of faintness. For this group of symptoms I prescribed causticum 6x dilution, and she obtained entire relief in a few days. While pulsatilla has this loss of control of the urinary bladder with cough, it seemed to me that causticum was decidedly indicated in this particular case. The result certainly justified the choice.

#### DISCUSSION.

- C. G. Fellows: I am glad to hear that paper, because I have tried causticum many times without result: Some one told me to try kali causticum, which I did, and with results.
- C. W. Hubbard: When clearly indicated, I get good results, unquestionably, from causticum

#### AN INTERESTING CASE OF MASTOIDITIS.

EDWARD B. HOOKER, M. D.,

#### Hartford, Conn.

This boy came to me eleven days ago for the first time. He was brought to me from out of town with the history that about eight weeks ago he had mumps incompletely, and about four weeks after that had appeared to develop a soreness about the left ear, to which they had paid no particular attention, but which had increased, and a swelling appeared about the ear, while a few days before he came to me he began to have a sharp earache.

I found him with a slight fever, 101°. I examined his ear, and I confidently expected to find middle ear affection. Mastoiditis in the great majority of cases begins with inflammation of the middle ear.

It is common after grippe, measles and scarlet fever. I expected to find him, as I said, with an inflammation of the middle ear. I found a little wax, which I removed easily, and obtained a good look at the drumhead, but found no inflammation. There was, however, some tenderness externally. On pressure around the ear I found edema, such as you do find in the superficial tissues in mastoiditis when suppuration is imminent or present. There was no tenderness except over the mastoid.

I sent for Dr. Angell, who examined the case, and without my telling him my diagnosis, he pronounced it mastoiditis.

I did not believe there was any chance whatever of curing this boy without operating, but I had had such good results with capsicum and ice that I determined to try the treatment. Accordingly he was sent to Mrs. Wing's Hospital—a very good one—and capsicum 3x and ice bag applied.

Now, let me say a word as to the management of mastoiditis occurring with middle ear disease. When you have an inflammation of the middle ear with congestion and bulging of the drumhead, with suppuration present or imminent, the quicker you make a slit in the drumhead and evacuate the tympanum the greater your chances of quick recovery. It is very readily done by use of a little chloroform, in the case of children, and I think physicians ought to familiarize themselves with the middle ear and should be able to puncture the membrane without calling in special assistance.

The boy, as I have said, was sent to the hospital, an ice bag put on the mastoid, and he began taking capsicum. That night he had a great deal of pain. Now in the treatment of mastoiditis I regard opiates just as I do in appendicitis; they obscure the disease, they obscure the symptoms; but he had such pain, was in such agony, that I allowed 1-16 of a grain of morphine to be given, and this gave him a The next day, Saturday, the temperature was just peaceful night. about the same, edema much more, and I felt certain that an operation ought not be delayed beyond Sunday. We kept on with the capsicum and the ice bag; the pain decreased without more morphine, and on Sunday I found him with practically normal temperature and a decrease of the tenderness and edema. I kept the ice bag and the same treatment going all day, and he was practically convalescent on Mon-He went favorably on from then and made an uneventful day. recovery.

The points I want to call to your attention are the possibility of mastoid disease without middle ear inflammation, and that it occurs after such diseases as measles, mumps, etc., where there is a genera infection of the system, and the very great value of capsicum and ice in the treatment.

Why capsicum is here better than other remedies usually given for inflammation I do not know, but it is a fact that is as well proved as any clinical demonstration we have that capsicum is of great benefit in mastoid disease. This was a case, apparently, for operation. The boy came to me on Friday, and went home the following Wednesday cured.

Now, one more thing. The boy is anæmic, and there was left after the subsidence of acute symptoms an enlargement of the glands of the neck for which I gave him mercurius vivus; he is getting stronger, and is taking Gude's Pepto-Mangan.

- O. What cured the patient, the capsicum or the ice?
- A. I do not know or care which, probably both.

#### DISCUSSION.

W. R. King: The description of this case and the success of the treatment pleases me. The line of treatment followed in the paper I have used, and it has lost me several operating fees. Cases that I had left at night with the full expectation of preparing for an operation the next day, have not needed an operation when the time came. I use the capsicum in the 6th. Dr. Houghton always used it in the 6th, and I presume I formed the habit in that way. This disease is generally accompanied with inflammation of the middle ear. Dr. Hooker's case seems to be unique in not having the usual complication.

H. D. Schenck: In two or three instances I have had cases similar in respect to not having any apparent inflammation of the middle ear I have been very successful with them by giving the remedy and the

local application of ice.

E. H. LINNELL: I have great confidence in capsicum here. I recently read a work by Dr. Clarence Baker in which he admitted the possibility of mastoiditis without inflammation of the mid-lle ear, says that in his opinion a slight primary unobserved middle ear trouble always preceded the other.

E. W. Beebe: I have an objection to the treatment, because I think I have a better. I incise the drumhead and inflate the ear. The pain stops immediately because it relieves the pressure, and the pressure is what makes the pain.

G. DEWAYNE HALLETT: As I recall this case, the drumhead was

quite normal; there was no sack on the posterior wall of the canal. For the symptoms he had I would have given the same treatment. The pain probably came from periostitis, not in the middle ear, and not necessarily from the mastoid. In the absence of any evidence of middle ear trouble and nothing on the posterior and superior walls of the canal, some doubt must be felt as to whether this was a case of mastoiditis.

J. N. Anderson: Did Dr. Hooker examine the patient's nose and throat?

DR. HOOKER: I did; they were in unusually good condition for a child.

Dr. Anderson: I have had several cases of earache. Finding no evidence of ear trouble I have traced the earache to bad teeth. Sometimes I have found neuralgia in the mastoid region in chi'dren, which was of reflex origin from the teeth. The dentist usually cures these cases.

G. A. Shepard: I believe that this was a case of periostitis and not mastoiditis. I think the mastoid was not involved although it appeared to be. I had a boy of five some time ago with evidence of pus in the mastoid. The canal and membrana tympani looked normal except for a certain deadness. I opened the mastoid and found the cells broken down and the cavity filled with pale granulations. The swelling was marked, extending up into the zygomatic region. I found the same granulations in the tympanic cavity resembling adenoid tissue. I never saw a case with such extensive granulations. The child was in a low state of general health. These cases where you find evidences of mastoiditis without middle ear involvement are where the general health is low.

Dr. Hooker: I admit the possibility of its being periostitis.

DR. SHEPARD: I have seen a number of cases where the condition prevailed of noninflammation in the mastoid, yet all the external signs of it including fluctuations. In one case I drew a teaspoonful of pus from the periosteum.

DR. SCHENCK: I have seen children at the Brooklyn Nursery whose general health was poor, where the signs of pus and tenderness over the mastoid were very marked. There seemed to be no trouble in the bone beneath the periosteum. They made absolutely good recoveries.

G. W. McDowell: I think we should be very careful about recommending this form of treatment to the general practitioner. It should not be used except at a hospital under competent care. These cases are sometimes as deceptive as appendicitis. I remember having a case that was apparently doing well under the general treatment: the pain was subsiding, the swelling lessened and all seemed to be doing well. I was prepared to discharge the case when suddenly the temperature shot up and general as well as local disturbance was evident. I operated and found the most extensive destruction of the cells. We do not al-

ways know what is going on under the external plate of the bone. The only safe way is to open it. We should not take the risk of recommending this expectant treatment unless the case can have very careful watching.

H. S. WILLARD: I think Dr. McDowell's point is well taken. It has been my practice to use local application of heat instead of ice, and I think with generally better results. I may say also that I have seen a number of cases of undoubted mastoiditis in which the cardinal symptoms were absent.

Burton Haseltine: The age of the patient should be noticed, for this factor makes a tremendous difference in the gravity of cases of mastoiditis. It is much safer to wait in the case of children than with adults. The cases in which you find great destruction of bone are generally in adults. I am sure that it is perfectly possible to have these cases without inflammation of the middle ear. I had the case of a woman of 40 who had had earache followed by impairment of hearing. The whole coming probably as the result of grippe. Grippe as well as the eruptive fever is capable of producing localized inflammation within the mastoid; these are probably the cases that escape our observation.

# A CASE OF MERCURIAL DEAFNESS.

H. C. ALLEN, M. D.,

# Chicago, Ill.

The chief object in reporting this case is to il'ustrate the necessity of constant care and the utmost vigilance on the part of the physician in the examination of a patient and in the construction of the anamnesis, on the correctness and completeness of which the selection of the remedy depends. Just here is the weak point in the armor of so many homeopathic physicians. Sufficient care is not taken in the examination, and the large majority, I regret to say, overlook the first and essentia! duty of the homeopathic physician, the making of a written record.

Under section 83 Hahnemann says:

"The individualizing examination of a case of disease demands of the physician nothing but freedom from prejudice and sound sense, attention in observing and fidelity in tracing the picture of the disease."

How few of us ever approach a case free from prejudice. Unless we do it is absolutely impossible to arrive at correct conclusions.

And again, in section 104, Hahnemann says:

"When the totality of the symptoms that specially mark and distinguish a case of disease, or, in other words, when the picture of the disease, whatever be its kind, is once accurately sketched, the most difficult part of the task is accomplished. The physician has then the picture of the disease, especially if it be a chronic one, always before him in his treatment. He can investigate it in all its parts and select the characteristic symptoms and compare them with the symptom !ist of the remedy."

"When the case is proper'y taken, under the rules laid down by Hahnemann," Dunham says, "any one can prescribe, for every one can select a remedy." And he might have added, unless the case be properly taken, no one, no matter how expert in materia medica or what his knowledge of symptomatology may be, can make a correct selection. The anamnesis should include both objective and subjective phenomena, and it is to the former of these on which we wish to 'ay special stress in this case.

Hahnemann in section 4 says:

"He is likewise a preserver of health if he knows the things that derange health and cause disease, and how to remove them from persons in health."

CASE.—Mr. J. C. K., aged 26, brown hair, blue eyes, fair complexion, weight about 140. He is a salesman in a large wall paper house, the foreman of which—a patient of mine—referred him to me for his deafness, for which he had been under the care of three noted specialists for some years. He could hear a watch tick but one inch in the left, and an inch and a half in the right ear. He was discharged for his deafness.

In examining his throat I found the soft palate and pillars of the fauces reddened and edematous, and the uvula more than twice its normal size.

On examination of his mouth I detected seventeen large mercurial amalgam fillings in his teeth.

The tongue was broad flabby, and showed impress of the teeth throughout the entire border.

He had suffered for years with ptyalism, saliva running out of the mouth and wetting the pillow in sleep. I sent him to a dentist to have

the amalgam fillings removed, and until the teeth regained a portion of their normal strength, to be replaced with cement.

From the symptoms elicited, the condition of the tongue, the throat, palate, uvula and profuse saliva, I gave him mercurius dulcis in various potencies for the next few weeks, and in less than three months the deafness was completely cured, and he returned to his former occupation.

This case is only one among a large number that could be enumerated where the principal factor in the cure was the removal of the cause, and I report it to this society, especially to call their attention to a thorough examination of the mouth in cases of deafness.

#### DISCUSSION.

W. R. King: Dr. Allen's case is particularly interesting to me, as I reported some years ago two cases of mercurial poisoning where examination of the mouth revealed the source of the contamination. In one case I was never able to see the woman in normal condition because she invariably removed her plate before I examined her. I finally discovered the plate—a very old rough one—and had it analyzed. It contained plenty of free sulphate of mercury to account for any symptoms. Dr. Allen's case brings this to mind.

E. B. HOOKER: I would like to ask if such effects are common from

the use of rubber plates?

H. C. Allen: It is my experience that they are very common.

E. W. Beebe: It would be interesting to know why Dr. Allen gave mercury for mercury, instead of nitric acid or hepar sulph., the usual antidotes.

H. C. ALLEN: Because the symptoms of the patient indicated mercury and not any other remedy. Under mercury in the Guiding Symptoms Hering says that mercury high is an antidote to mercury low. If the patient had presented symptoms for nitric acid or hepar sulph., she would have received one of those remedies instead. I gave mercurius dulcis in the millionth potency.

G. W. McDowell: Would not a patient poisoned with mercury always presnt mercurial symptoms? If I had the cause of the symptoms thoroughly removed, I should have expected the symptoms to follow

without further medication.

H. C. Allen: Your expectations would have been disappointed. The human system can seldom or never rid itself of the effects of mercury unaided.

G. W. McDowell: How long was it before the patient began to

improve?

H. C. Allen: In this case, right away.

#### CAUSTICUM AND SEPIA— TWO CASES.

G. E. HEATH, M. D.,

#### Gardiner, Me.

In apology for the two cases about to be cited I would say that they do not properly belong to the section of eye, ear and throat. Until too late for withdrawal from the program the report was supposed to fall under the general head of clinical medicine.

Case I.—Causticum. While prescribing one evening for another member of the family my attention was called to the mother of the household, a woman of eighty years. She had for some weeks suffered from a cough, and was greatly annoyed by the involuntary discharge of urine after each attack of coughing, both night and day. She had looked upon it as a necessary, and, therefore incurable, evil, and expressed surprise that I should speak with confidence of a remedy that would correct the annoyance. Further questioning brought out the following symptoms: Hoarseness, cough with inability to get low enough to raise the mucus, paralytic weakness of the legs, unsteady walking, worse mornings. Causticum 3x was given. Twenty-four hours later the urine was under control, and the enuresis never recurred. The cough and hoarseness were entirely relieved in a few days, and the causticum was continued for the general weakness. The patient is now in vigorous health.

Case II.—Sepia. A patient who declared herself well in every particular, asked for relief from a single symptom, an intensely offensive odor of the urine. She described the urine as fetid, nauseating, usually normal in appearance, but sometimes with reddish, cloudy sediment. This symptom had been persistent for six months. The patient was a slight brunette, about forty years of age.

Sepia 12x effected a complete and rapid cure, and one year later the patient reported that there had never been the slightest recurrence of the annoying symptom.

# HOMŒOPATHIC REMEDIES IN THE TREATMENT OF IN-CIPIENT AND IMMATURE CATARACT.

E. H. LINNELL, M. D.,

#### Norwich, Conn.

In eighteen ninety-seven, at the first meeting of this society after its reorganization, I read a paper, entitled "The Value of Remedies in the Treatment of Cataract." Nothing was farther from my intention than to claim that mature cataract had ever been or ever could be cured by remedies. What I did argue was that incipient cataract might be arrested and immature cataracts might be retarded in deveolpment by carefully selected homoeopathic remedies.

In concluding my paper I remarked that our knowledge of the influence of drugs along this line might be advanced, and more exact indications for their employment might be gained if members of the society would give us careful clinical reports of cases where accurate diagnosis had been made, careful records of vision had been kept, and actual changes in the lens as revealed by the ophthalmoscope noted. Thus our knowledge would rest upon a scientific basis, and reports of cures or improvement would command confidence, which is not the case many times in clinical reports not confirmed by scientific or accurate observation. In furtherance of this end I beg to submit three records from my case books of cases treated by iodoform without local applications or any other treatment.

CASE I.—Mrs. P., about fifty years of age, consulted me in May. 1894, for a scotoma of the left eye "like a bee." Ophthalmoscopic examination showed a superficial cortical opacity toward the nasal side of the lens, but not reaching to the periphery. The opacity was uniform, not striated in outline. A much smaller opacity was discovered in a similar location in the right lens. The scotoma had annoyed her for ten days. She was not strong, but complained of no other symptoms except a chronic form of indigestion characterized by pain after eating and much flatulence. Her central vision after correction of refraction was normal. I gave her iodoform 3x. Six days later she called again and reported that the scotoma was smaller and less dense.

The bee had become a fly, and was translucent, as she expressed it. The medicine was continued with progressive improvement until August, when the right lens was perfectly clear, and the left showed only two small, short, narrow opaque lines at the location of the former opacity. Incidentally the stornach symptoms were also much relieved so that she said she was having less trouble in that direction than for years. I saw her at frequent intervals until her death, in 1903 I think, and she never again complained of the scotoma. I have no record of a later ophthalmoscopic examination, but have every reason to believe that the lens remained transparent.

Case II.—Mrs. W. H. V., age about 50, first consulted me September 4, 1900. V. o. d. =  $^{18}/_{50}$ , and with 4.00 s. e. V. o. s. =  $^{15}/_{50}$  + and with 4.50 s. J. 3 difficulty. Ophthalmoscope showed diffuse stippled haziness of each lens with faint striæ in lower periphery. Could make out no details of fundus in right eye. In left out:ines of disc were seen very indistinctly. Iodoform 3x four times daily was given.

October 2d lenses were clearer so that outline of disc could be clearly seen in each eye, vision slightly improved. The medicine was continued, and by the 2d of January the stippled appearance of the surface of the lens had entirely disappeared. The right fundus could be distinctly seen. The left was somewhat obscured by the opaque striæ, but the cortex between the striæ was perfectly transparent. Distant vision was only slightly improved, but she could read some words of J. I. with + 2.50 s. o. u. The remedy was continued until the following August, when V. o. u. = two detters of  $^{15}/_{20}$  and J. I. with some difficulty. She then complained of seeing flashes of light, and the prescription was changed to phosphorus 6x, under which the phosphenes disappeared, and the vision still urther improved. Soon afterwards she was burend to death.

I have found this diffuse haziness of the cortex with more or less of a stippled appearance a valuable indication for iodoform, as first pointed out, I think, by Dr. W. R. King, of Washington.

Case III.—Mrs. B., age 62, first seen in March, 1894. At that time there was a slight opacity of each nucleus. V. o. d. after correction of refraction was  $^{10}/_{30}$ , and V. o. s. was  $^{10}/_{15}$  difficulty. With the two eyes together she read Sn. o.8. Iodoform 3x was prescribed, and continued until October, when V. o. u. =  $^{10}/_{20}$  and Sn. o.6, and the lenses had cleared so much that I could see the details of the fundus

clearly, although the lenses were not entirely transparent. The interesting part of the history is to come.

The patient lived in another city, and was not seen again for nine years. In October, 1902, she again came to see me. She was still using the lenses previously prescribed, and with them could read J. 4, which is a little smaller type than Sn. 0.6, which she read when they were first prescribed. Distant vision had declined a little in the right eye, being  $^{15}/_{70}$ , but in the left eye vision was still  $^{16}/_{80}$ . The lenses were practically as at the former visit, nine years previously.

I think this case is interesting as showing a stationary condition of incipient cataracts for so long a time, but whether iodoform was instrumental in arresting their development it is, of course, impossible to say.

#### DISCUSSION.

- C. G. Fellows: I have used iodoform in this case, but I do not know the indications for it. I would be glad if some one would give me a good reason for it, for I think I have got some good results from it. Dr. Linnell: I am quite sure that iodoform has produced cataract, and that is one good homoeopathic reason for it. Secale has also produced cataract.
- H. S. WILLARD: It has been my custom for a number of years to give causticum in all cases of incipient cataract. I well remember a case of incipient cataract in a man of about 50, a full-blooded German. The vision in the affected eye, the left, was <sup>22</sup>/<sub>100</sub>. For three years he has had causticum 3x three times a day. Later I gave him causticum 30, and it was, and is, a surprise to me to observe how much better it acts. The 3x did nothing or very little, but he improved rapidly under the 30. His vision is now <sup>15</sup>/<sub>50</sub>, and he can read two letters on the <sup>15</sup>/<sub>40</sub> row. There was no other treatment than the internal administration of causticum
- G. A. Shepard: A case came under my notice two years ago which had been under the care of an old school man. He had told her that there was nothing to do at present, she would have to wait until it was ripe before it could be operated on. The vision in the affected eye was  $^{20}/_{90}$ . It was a cataract in which the cortex (?) showed hazy spicules. The nucleus being very hard. I gave her causticum 30 with the result that her vision cleared up so that she had  $^{20}/_{40}$  vision. She was out of my care for a year, when she came back with  $^{20}/_{50}$  vision. A return to causticum 30 resulted in further improvement to  $^{20}/_{30}$ , and so remained. This was the most distinct and marked improvement that I ever had from a remedy. Only one remedy was used, and the effect was positive

and capable of exact measurement. Anyone who cannot believe such an effect, it seems to me, is outside the pale.

C. L. Rumsey: Has any one had any experience with cineraria in the cure of cataract?

F. D. Lewis: I have a number of cases of cataract under treatment, and the best results I have obtained are from alumina. I selected it because the patients are old with sluggish digestion.

J. B. GARRISON: This shows us that we should treat the patient and not the disease.

### ARSENICUM IN IRITIS.

H. D. SCHENCK, M. D.,

# Brooklyn, New York.

This attack of iritis occurred as a complication following a preliminary iridectomy for repairing senile cataract.

Mrs. F. McE.. aged 63, was first seen December 5, 1905. Her mother and one sister had had attacks of iritis, her sister losing one eye from this cause. Mrs. McE. was a large, fleshy woman, rather phlegmatic and in fairly good health. She had never worn glasses except to correct her presbyopia, and did not begin to have this correction until after she was fifty years old. For two years her vision had been gradually failing, but she had never had pain, fatigue, strain or other trouble with the eyes, and almost never any headache.

The vision was  ${}^6/{}_{80}$  in the right eye, and  ${}^1/{}_{60}$  in the left. Neither was improved with a glass. There was a general diffuse haziness so that few details were to be made out in the right fundus, and none at all in the left. There were no spicules in either lens. The red reflex could be seen at the inner side of the left lens more than at any other point. Light projection was good.

She was seen a number of times during the winter but there was no change in either eye. On June 6th a preliminary iridectomy was made in the left eye, with rather extensive massage to the lens through the cornea. There was no pain or disturbance until the third day, when a boring, "scratching" pain developed in the eye and pain in head, aggravated at night. One drop of a solution of atropin—four

grains to the ounce—had been instilled on the second day. Aconite 3x was prescribed for pain. In spite of this the deep scleral injection increased with attacks of pain at intervals, day and night. On the fourth day the remedy was changed because of nightly aggravation to mercurius vivus 3x.

She was kept quietly in bed with the eye bandaged, with applications of the atropin for the next few days, with slight amelioration of the pain. She was allowed to go home from the hospital at the end of ten days, but continued to suffer with what she called attacks of neuralgia each night. The photophobia was intense on this account. Rhus tox. was prescribed without benefit.

By June 27th, three weeks after the operation, the eye was still very much inflamed, the blepharal conjunctiva bright red, and she had attacks of neuralgia through the left side of the head, awakening her out of sound sleep in the early hours of the morning, and continued until daylight. She complained of the pain being burning in character, sharp and extending through the left eye.

In spite of the atropin several adhesions formed. On June 28th arsenicum 3x was given, one grain to be taken every two hours. The attack of pain that night was very slight, and she had but one other slight attack a few nights later, the recovery being rapid and satisfactory, so that in ten days she was dismissed with the eye free from redness, only having the adhesions remaining.

The arsenicum 6 was substituted for arsenicum 3x after the latter had been given for three days.

### RUPTURE OF THE SCLERA.

GEORGE RHOADS, M. D.,

Springfield, Mass.

February 4, 1899, Warren J., 18 years, South Hadley, Mass., a student in Amherst College, was struck in his left eye by a flower pot thrown from a second story window of a burning building yesterday afternoon, which caused total blindness, his right eye having been lost in childhood.

I found the patient in bed with the eye bandaged. He was not suffering from any pain or discomfort. On removing the bandage I found a cut in the upper lid and a large rupture of the sclera about six millimeters from the corneal margin on the outer side of the eyeball. The rupture was at least ten millimeters long, through which a piece of the iris protruded. The eyeball was in a collapsed condition with the anterior chamber full of blood. I cocained the eye and removed the piece of iris, flushed it with merc. cor., I to 10,000, dusted the wound with iodoform, and applied a very light bandage. The family physician prescribed aconite. I ordered complete rest in bed.

February 5th the eye is comfortable with no suppuration. He is totally blind. The eye was treated the same.

February 9th the eye is still comfortable. There is no pus. It is more normal in shape, and the blood in the anterior chamber is absorbing. There is a large depression in the region of the rupture. Still no sight. The same treatment was given.

February 15th. The eye is comfortable. The wound in the lid has healed. He can distinguish daylight from darkness. I stopped the iodoform and merc. cor.

February 19th eyeball looks more normal, and he can see more.

February 27th his sight is gaining.

March 12th his sight still gains. The eyeball is not round, yet there is a deep depression in the region of the rupture.

April 5th sight is very much better. I allow him to wear smoked glasses and to walk about the house with a cane.

May 28th. He sees a great deal now. The sclera in the region of the rupture is not quite normal in color or shape. He has no iris and I suspect no lens. The cornea is clear, and I can get the red reflex.

June 14th he called at my office. O. S.  $+ 16 \text{ s c} \bigcirc + 6 \text{ s c}$  axis 90 =  $^{20}/_{50}$ . B. O. S.  $+ 12 \text{ s c} \bigcirc + 4 \text{ s c}$  axis 90. I prescribed colored glasses to be worn over them. There is no lens in the eye. It must have been lost at the time of the accident.

July 14th, O. S.  $+20 \text{ s c} \bigcirc +6 \text{ s c axis} +90 = \text{reading vision}.$ 

September 14th. O. S. + 13 s c  $\bigcirc$  + 4 s c axis 90 =  $^{20}/_{80}$ . B. O. D. + 13 s c. O. S. + 13 s c  $\bigcirc$  + 4 s c axis 90 for distance, and B. + 17 s c  $\bigcirc$  + 4 s c axis 90 for reading.

May 29, 1892, he sees  $\frac{20}{20}$  with a little difficulty with his distance glass, and he reads with ease with his reading glass.

December 5, 1903, there is no change.

August 16, 1906, there is no change. He always wears smoked glasses when in the bright light. Did the aconite cure this case?

#### DISCUSSION.

C. G. Fellows: It strikes me that the iodoform and the bichloride of mercury had as much to do with the cure as the internal remedy. I had a case a few weeks ago of injury to the eye that got well without any internal remedy. A boy with a rusty knife-blade got a cut in the eye at the iris and ciliary body. The pupil was dilated and a wash of boric acid used, and he made an excellent recovery without the administration of any internal remedy. It simply was not infected, a fortunate accident, that is all.

D. W. Wells: I would like to ask why aconite was prescribed? How was it homoeopathic to the condition?

DR. RHOADS: I shall have to say that it was prescribed empirically. The family physician had more to do with that than I did. I do use aconite in material doses for extensive inflammatory action in the eye with the view of limiting it.

**Scopolamin.** Dr. Hallett has used this in thousands of cases, and has had glaucoma develop under its use. He prefers it to atropin as a cycloplegic, because its paralysis passes off sooner, in cases where there is a probability—"or a problematic possibility"—of glaucoma. That it will reduce tension he considers a faulty conclusion.

Cystic Swellings at the external angle of the eye are usually dermoids. In some cases they communicate by a small opening with an intracranial sac.—Am. J. of Surg.

Digitalis, the "heart stands still."
Cactus, it is "squeezed."
Spigelia, it "purrs."
Glonoin, the "pulse" is felt all over the body.

Dr. S. Yankauer's new sound for the Eustachian tube is composed of a strand of catgut covered by an elastic resinous coating which gives smoothness to the instrument and allows boiling. Spaces are marked to indicate when it has passed the mouth of the catheter and the depth of introduction into the tube. The largest size is passed first, then the smaller until the stricture is passed. The sounds are thought by the author to be softer, smoother and more flexible than those in common use, and no irritation has been observed following their introduction.—

Laryngoscope, 1906.

# PRACTICAL HINTS.

#### Conducted by

G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

Edema of Retina, Loss of Color Field, etc., Due to a Focus of Endarteritis in the Ophthalmic Artery. The writer has had in the last year a young woman with a diffuse endarteritis who, by reason of such a focus in the ophthalmic artery, developed an edema of the optic nerve head and retina. The vision went from  $^{20}/_{15}$  to  $^{3}/_{200}$ , the perception was lost for red and green in a period of six weeks, and under vigorous use of iodide of potash a recovery took place. Vision returned to normal as did the color field.

At no time were there any retinal hæmorrhages nor vitreous opacities.

HALLETT.

A Useful Collyrium. Many persons have a need of glasses and will not wear them, at least not constantly, and the result is an irritation of the eye which shows itself in redness of the conjunctiva, etc., with a feeling of heat. dryness and roughness. For such the following makes a very satisfactory collyrium:

В.	Ext. witch hazel destil
•	Sal. adrenalin chlor
	Cocain hydrochlorgr. v.
	Ol. rosæmi.
	Sol. boroglyceride U. S. P. 5 % aq. rosæ ad3iv.
M.	Cola per chart. Amber bottle.
	-3ss in 3i of warm water and use in an eye cup.
_	,

H.

Posterior Sclerotomy Preliminary to Iridectomy in Acute Glaucoma. Dr. Arnold Knapp (Arch. of Oph., July, 1906) has been using this method in acute cases where the eyeball is very hard and the anterior chamber too shallow to permit satisfactory incision. The advantages are that the tension is relieved and the anterior chamber deepened before the cornea is entered. Also it permits the use of atropin for a few days if the conditions demand it after operation. He reports seven cases, one of which had an intraocular hæmorrhage. This was an old case secondary to a lens dislocated into the anterior chamber, and would, very likely, have followed a simple iridectomy.

H.

Our Legal Duty to Attend Patients. There appears to be a popular impression among many physicians that, by reason of the special privileges and immunities which the physician enjoys, he is under a legal duty to accept employment from any person who requests his professional attention; the idea seeming to be that he is under the same sort of a duty as is the common carrier or inn keeper at the common law to render services to whomsoever may apply. There is in the law no foundation for this impression, and indeed there are express decisions to the contrary.

While a physician is not bound to accept employment when called upon, yet if he does enter upon the employment without any express stipulations as to the nature or extent of his treatment, he is bound to continue his attendance until in the exercise of a properly skilled and educated judgment he decides that the patient is no longer in need of medical attention unless, before that time, he is dismissed by the patient, or unless he discharges himself upon giving the patient a reasonable notice of his intention to cease his visits and thus allow the patient an opportunity to call in other medical or surgical assistance.

The general rule does not make the physician in any sense the warrantor or insurer of the success of the treatment, in the absence of special contract to that effect. Failure to effect a cure does not, alone, establish or raise a presumption of want of skill or of negligence on the part of the physician.

The law does not in any case, without special contract, require the highest degree of skill and diligence possible. A physician is bound to bestow such reasonable and ordinary care and skill, and diligence as physicians and surgeons in the same general line of practice ordinarily have and exercise in like cases, time, and locality being taken into consideration; and that a physician is bound to exercse the average degree of skill possessed by the profession in such locality. This holding is in accord with the great weight of authority.—Medico-Legal Bulletin.

New Operation for Glaucoma. "Iridencleisis antiglaucomatosa," subconjunctival fistula of the anterior chamber, is proposed by Holth, of Christiana, as a new principle in the operative treatment of glaucoma.

Since 1904 he has made in animals, then in man with absolute glaucoma a subconjunctival pinching of the iris so as to produce a persistent fistula. To avoid infectious complications he makes the conjunctival incision ten millimeters from the cornea. Instead of an ordinary iridectomy, a small angular peripheral iridotomy with enclosure of the strip, may be made, allowing the pupil to remain round.

This operation causes no other inconvenience than a slight irritation of the iris of no consequence at the end of the first week. Holth reports operating forty-one times. In three cases it was made alone in patients who had previously had an iridectomy. Twenty-one times

it was performed at the same time as an iridectomy, and in nine cases with an iridotomy. Only twice did the operation fail, the iris re-entering the anterior chamber. Thrice the tension fell, but did not become normal. Thirty-five times (87 per cent.) a durable normal tension was obtained, either immediately (in thirty-one cases) or after several months. The latest operation preceded the report but two weeks, the others were then at least four months old.

In the preceding experiences of Bader (1873) and Herbert (1903) it seems that the anterior face of the iris was alone utilized in obtaining the enclosure; in these conditions the anterior face forms a cul-de-sac which does not permit the establishment of a true fistula—to obtain that it is necessary to create a rent in the posterior layer, the pigmented epithelium.

Holth was led to this by observing that since 1893 his iridectomies for glaucoma were most successful when they resulted in a cystoid cicatrix by including the periphery of the iris in the wound.

Bacteriology of the Mouth. According to Dr. H. H. Leonigs, in twenty examinations of clean mouths the greatest number contained staphylococci; streptococci were noted in two cases, pneumococci in eight, bacilli coli communis three, and in one case bacillus prodigiosus was found. Large numbers of acid and gas producing germs were discovered.

In ordinarily kept mouths the putrefactive micro-organism is especially numerous; two cases showed the presence of influenza bacillus.

In filthy mouths he found thrush and millions of bacteria of which many were virulent. In some the pneumococcus and putrefactive bacteria.

In the tobacco chewer's mouth the staphylococcus pyogenes albus and aureus, streptococcus pyogenes and many acid and gas producers as well as putrefactive bacteria and fungi sarcinæ were found. The yeast fungus and influenza bacillus and Friedlaender bacillus were isolated.

It will be seen that even in healthy mouths both pyogenic and pathogenic micro-organisms are present, and he reaches the following conclusions as to the best method of cleansing the mouth:

Thoroughly scrubbing the gums with a stiff brush and warm soap water followed by rinsing with normal salt solution and rubbing with sterile gauze from two to five minutes. This, supplemented by rinsing with antiseptics, will render the mouth sterile.

A satisfactory method of x-ray study of esophageal diverticula and strictures consists in fluoroscopy of the thorax while the patient is swallowing an emulsion of bismuth subnitrate. A skiagraph may be made immediately afterwards as a supplementary record.—Am. J. of Surg.

#### SOCIETIES.

#### THE ATLANTIC CITY MEETINGS.

Last week, September 10-15, as all of us are aware, The American Institute of Homœbpathy, through its efficient local committees, had the honor of entertaining the Seventh Quinquennial International Homœopathic Congress at Atlantic City. In conjunction with the Congress the Institute held its business sessions, while contemporaneously with it The American Homœopathic Ophthalmological, Otological and Laryngological Association; The National Society of Physical Therapeutics, and the American Association of Orificial Surgeons held their annual meetings.

These sessions brought together a very representative and scientific assemblage of our school,—every continent except Asia was represented by delegates; but this was not entirely silent, as India contributed a very satisfactory report of the progress of homoeopathy and its institutions for such a conservative community.

There were about 550 members of the Institute present, and 500 visitors registered; probably another thousand visitors did not register. The accessions to the ranks of the Institute were about 130; less than half of the number last year (346), when we celebrated the one hundred and fiftieth anniversary of Hahnemann's birth.

The officers of the Congress were:

Honorary President, John H. Clarke, London, England.

Honorary 1st Vice-President, W. K. Bouton, Melbourne, Australia.

Honorary 2d Vice-President, Eugene H. Porter, New York.

Honorary Secretary, D. Dyce Brown, London, England.

Acting President, James H. McClelland, Pittsburg.

Acting 1st Vice-President, Howard P. Bellows, Boston.

Acting Secretary, J. Richey Horner, Cleveland.

In the section, "Principles and Propaganda of Homœopathy," there were read to the Congress very interesting and encouraging reports of the progress made by homœopathy during the past five years in England, Germany, France, Holland, Italy, Russia, India, Tasmania, Australia, Brazil, and Mexico. In the communication from the latter country, where medical education is strictly under the Mexican gov-

ernment and the medical colleges are supported by it, it was gratifying to hear that the two schools are on an equality in this patronage.

One of the most widely interesting papers of the meeting was that of Dr. James W. Ward, President of the Board of Health of San Francisco, on "Sanitation of San Francisco following the Fire." It was a concise narrative of the stupendous work of the board of health under the able leadership of the author, in coping with the almost insurmountable task of excluding the ravages of contagion from such a crowded and large city population, when for a truth there was virtually no sewerage for half this number, and a very meagre water supply, or none, for the whole of it. To give an idea of the many and apparently trivial conditions which needed to be looked after, and the thoroughness with which they were handled, even the small drinks sold from the numerous curbstone stands, which sprang into existence upon the closing of the saloons, received Dr. Ward's attention, on account of the possibility of such being manufactured from deleterious substances; samples were analyzed, with the result that within a week of the conflagration about 500 cases of bottled small drinks and almost 200 barrels of manufactured cider were dumped into the harbor.

The educational exhibit of several of our medical colleges was, as the name implies, exceptionally educative.

The perennial question of an Institute journal was again laid by for future consideration. It is gratifying to note this evidence that the majority realizes what a great amount of political influence would be placed in the hands of a select few, if such journal were created, as well as the effect of such a publication upon our existing medical journals.

The officers-elect of the Institute are:

President, E. Beecher Hooker, Hartford.

1st Vice-President, James W. Ward, San Francisco.

2d Vice-President, W. E. Reilly, Fulton, Mo.

Secretary, Frank Kraft, Cleveland.

Treasurer, T. Franklin Smith, New York.

Board of Censors, Millie J. Chapman, Eldredge C. Price, A. C. Cowperthwaite, A. W. Bailey, George H. Quay.

Registrar. J. H. Ball, Bay City, Mich.

Necrologist, C. B. Kinyon, Ann Arbor, Mich.

We think we voice the sentiment of the members of the O., O. and L. Society in cordially thanking the president and executive committee for the judicious selection of our place of meeting. No Esculapean lore was lost in our sessions on account of inability to hear.

The local committee of the Institute endeavored to obviate the acoustic difficulties that we experienced at our previous otherwise most enjoyable session (1899) at Atlantic City by changing the location of the Congress and Institute meetings from the Steel to Young's Pier, but this proved ineffectual; the Section of Gynæcology and Surgery procured an assembly room for their later sessions in Young's Hotel.

We express the hope of many who were in attendance that the next time we meet in this city by the sea a quieter spot (or spots) will be provided for the business and scientific sessions—secluded from the distraction of the surf and board walk with their noise and crowds.

Among the specially instructive papers presented before the O., O. and L. Society was the symposium on the "Resection of the Nasal Septum," which was enhanced by the clinical demonstration of a well selected case in the modernly equipped operating room of the recently enlarged sanatorium, Galen Haji.

Dr. Linn, in his paper, "Notes of Special Work in the European Clinics," spoke of the extended clinical experimentations and observations in the English and German clinics by Wright and Hiller on the "opsonic power of the blood" in curing tuberculous conditions, especially of the eye, when under influence of injections of tuberculin. This elicited from Dr. J. Knox Shaw the pleasing information that quite extended experiments are being made in the London Homoeopathic Hospital, in which is demonstrated by the "plus and minus opsonic index of the blood" the action or an action of some homoeopathic remedies. With Dr. Shaw we hope that this may prove an incontrovertible method of confirming Hahnemann's law of Similia Similibus Curentur to the entire satisfaction of the more progressive members of the dominant school of contraria.

Also of particular interest may be mentioned the reports of an undoubted cure of a case of recurrent rheumatic iritis with mercurius biniodide, and of a case of tubercular choroiditis.

Last, but far from least in our memories, the social functions of the Congress, especially those under the direction of the ladies' Meissen Club, won a success such as few can accomplish better or as well as those specialists in the art of entertainment—our Atlantic City hosts.

A. W. P.

## BOOK REVIEWS.

BEFORE AND AFTER SURGICAL OPERATIONS. A Treatise on the preparation for and the care of the patient after operations; including Homoeopathic Therapeutics. Written with special reference to the needs of the General Practitioner and the Hospital Interne. By DEAN T. SMITH, B. Sc., M. D., Professor of Surgery and Clinical Surgery, University of Michigan, Homoeopathic Department, Ann Arbor. 260 pages. Cloth, \$1.25, net. Postage, 8 cents. Philadelphia. Boericke & Tafel, 1906.

Homoeopathy had been practiced in this country for more than twenty-five years before there was a homoeopathic surgeon as such. The distinctive feature of this eminently practical little book is its homoeopathic therapeutics; these are to be found in the various books on surgery that have been written by our homoeopathic surgeons, but in the very few (if any) books of this class upon surgical nursing that have been published they will be sought in vain. The applicability of homoeopathy in surgical practice and the superior results thus obtained -other things being equal-have been amply demonstrated over and over again; the surgical member of a homoeopathic society who does not prescribe homeopathically should ask himself, "Why should his fellow members send their surgical work to him in preference to the allopathic surgeon." The drugs with their indications and potencies given in this book are, for the most part, such as Professor Smith has used in his own practice with success. Of course, medicines alone will not suffice in surgery; next to aseptic methods in operations, proper nursing has contributed more than any other single factor to the success of modern surgery.

The principal object in the mind of our author was the necessity in medical literature for minute details of the after care and the preparation of surgical cases. This need, he writes, "has been emphasized to me by a large experience, operating in private homes for physicians whose lack of experience in caring for surgical cases made detailed instructions necessary." The chapter on eye, ear, nose and throat cases

was written by Professor R. S. Copeland.

After the first five chapters—Preparation for a Surgical Operation. First Care After Operation, After the Reaction From Anæsthetic and Shock, Special Complications, and Dietetics—the following eighteen chapters classify the operations. A page is devoted to menstruation in the first chapter. "An operation often hastens the appearance of the

flow and, other things being equal, it is better for the patient to recover from the shock of operation before menstruation comes on." He pays no attention to the menstruation if the condition for which surgery is to be done will not safely permit delay. He has not known of any case that did badly because the operation was performed during the men-

strual period.

The same care is advocated in the case of a cataract or mastoid operation as in a laparatomy; then the percentage of loss from suppuration should be reduced to almost nil. Dr. Copeland applies a round pad of sterile gauze and fills the orbit with cotton after cataract extraction, and removes the patient to a "large, airy, sunny, and above all else well ventilated room. "The chance of secondary infection," he writes, "is much less in such a place than in a crowded ward with air poisoned by the exhalations of a multitude, or even of a few, sick people and attendant nurses." He says: "If the tissues be firm and elastic, the bodily health good, and, above all, if the circulatory organs be free from involvement, advanced age is not detrimental to the ultimate result of cataract extraction." We are supplied to high no mention of vinegar inhalations after chloroform for of succus calendulæ, locally, for postoperative soreness.

A Non-Surgical Treatis on Diseases of the Prostate Gland and Adnexa. By George Averall, A. B., M. D. Chicago: Rowe Publishing Co., 1906. Illustrated. Pp. 228, x. Third edition. The second (double) edition was exhausted within less than a year.

The author admits that there are many cases where the use of the knife is indispensable, but asserts that the reckless use of the knife is resorted to too often. While cautioning against electricity at the hands of those not thoroughly familiar with the properties of the various forms, he recommends the high frequency current for acute inflammation and irritation and as a germicide, particularly for deep-seated genococci, etc., which are out of reach of the ordinary disinfectants.

gonococci, etc, which are out of reach of the ordinary disinfectants. Several "new" instruments are described which should prove valuable. The book should be read by every physician, even though he does no genito-urinary work; the consideration of how gonorrhæa poisons the system is alone worth many times the price of the book and the time expended.

THE EAR AND ITS DISEASES. By SETH SCOTT BISHOP, B. S., M. D., LL. D., Honorary President of the Faculty and Professor of Diseases of the Nose, Throat and Ear, Illinois Medical College; Pro-

fessor Post-Graduate Medical School and Hospital of Chicago; Surgeon to the Post-Graduate Hospital, and to the Illinois Hospital; Editor Illinois Medical Bulletin; one of the editors of the Laryngo-scope, etc. 439 pages; 227 illustrations, 27 of which are colored lithographs. Price, \$4.00, net. Philadelphia: F. A. Davis Co., 1906.

This admirable text-book for students and physicians is an outgrowth of the author's work on "Diseases of the Nose, Throat and Ear." The first five chapters are devoted to a clear exposition of the anatomy, profusely illustrated—as is the rest of the book—with particularly lucid preparations. One of the forty chapters is devoted to the consideration of life insurance as affected by diseases of the ear, two to the ill effects of various diseases and drugs on the ear, and another to a general consideration of diseases of the ear, nose and throat based on a study of 21,000 cases. based upon the author's practice of over twenty-five years. Two chapters treat of rhinitis and two more of the naso-pharynx and post-nasal adenoids.

In many hundreds of adenectomies by his assistants or himself there has been no accident or hæmorrhage of importance. He considers ethyl bromide the preferable anæsthetic and as safe as ether, but it must be used fresh, and the patient should be first calmed; the contents of the (one ounce) bottle, or tube, must be used the same day it is opened or thrown away; preparations that have been exposed to bright light or air should not be used. Hence the cloths or flannel masks which have once been employed in producing the narcosis shou'd not be used

again unless thoroughly cleansed and aired.

"The patient is held seated on an assistant's lap with feet and arms gently but firmly pinioned. An ounce (30 grammes) of the ethyl bromide is poured into the inhaling cone, or mask, and given in the same manner as in etherization, allowing a minimum of air to enter; probably not more than half an ounce is taken. Anæsthesia is induced in about one minute, and lasts about five minutes; a slight extension of the extremities is noticed after a few inhalations, and the breathing usually continues deep and quiet. Complete anæsthesia is attained as soon as this extension begins to disappear, and at this instant is the time to operate rapidly. We may prolong the narcosis for a few minutes only by adding another ounce to the inhaler. The patient quickly recovers consciousness, and after lying down a few minutes is ready to be taken home. One needs to take care not to wound the Eustachian orifices nor to drag a mass of adenoid tissue down and leave it hanging."

A TREATISE ON CHOLERA AND KINDRED DISEASES. Second edition. By DWARKA NATH RAY, M. D., L. S. A. (London). With an intro-

duction by T. F. Allen, A. M., M. D. 560 pages. Calcutta: King & Co., 83 Harrison Road. 1906.

Twenty-two years ago the author presented as his graduation thesis "Cholera, Its Preventive and Curative Treatment," which so impressed the late Prof. T. F. Allen that he advised its publication in book form. Since then he has been in active practice in Calcutta, adding materially to his experience in this grave disease, and collecting material for a new and more comprehensive work, as the title indicates. After taking up the history, etiology, modes o propagation, predisposing and exciting causes, varieties, symptoms, diagnosis, prognosis and morbid anatomy in a clear and thorough manner, he devotes the major portion of his work to the homoeopathic treatment and the recital of descriptive cases. Some idea of the completeness with which the treatment is handled can be formed from the fact that he devotes 200 pages to the remedies with their indications, supplementing these with a symptomatic arrangement of the remedies, embracing 175 additional pages. probab'y the only complete treatise on this subject by a homocopathic physician who has enjoyed the advantage of studying the disease at its endemic seat in his native country, India.

C. H. H.

THE TEST DRUG-PROVING OF THE O., O. AND L. SOCIETY—A REPROVING OF BELLADONNA. Arranged and condensed by the General Director of the Proving, Howard P. Bellows, M. S., M. D., Professor of Otology and formerly Professor of Physiology. Boston University School of Medicine. Pp. 665. Four pages of plates. Boston: Published by the O., O. and L. Society. 1906.

This monumental work is dedicated "To the Cause of Progressive and Scientific Medicine, by those who believe that the quickest, the safest and the surest way of curing the sick lies in the application of the therapeutic principle SIMILIA SIMILIBUS CURANTUR." Had we written the foregoing the last word would have stood, as Hahnemann wrote it, CURENTUR.

Following the introduction, the history of this proving is given, then the examiners' forms that were employed; chapter three, much the longest in the book, gives the narratives (the day-books) of the fifty-three provers, each followed by its synopsis; but the most original chapter, which follows, presents the results in a new schematic form—physiological or systematic, clearly arranged for easy study and ready reference—chapter six "summarizes in general terms," and is wonderful'y condensed—the 282 pages of chapter three being boiled down to sixteen.

Dr. Solomon C. Fuller made seven experiments upon anima's, with autopsies, and controls. He concludes that belladonna "when a lmin-

istered to animals as described above," develops fairly constantly pathological lesions easily demonstrable; maybe acute cerebritis; profound disturbance of the ganglion cells of the anterior horn of the cord, as shown not only in the paresis which is present in all cases, but in the histological pictures; acute interstitial myocarditis seems the rule; pulmonary emphysema; the largest percentage of the experiments showed destruction of the hepatic cells; and the administration of the drug was followed also by gastritis, entero-colitis, and even by ulceration of the gut and stomach.

As most of our readers know, this work has been a test not only of a drug but of a method of drug-proving, scientific observation and examinations by specialists with the most modern means of research; the volume before us demonstrates the value of this idea of Dr. Bellows, and affords a practical working model of the most scientific way to ascertain the therapeutic properties and scope of a drug. Modified as suggested by Dr. Bellows in the appendix (an endowed institute instead of individual effort or even boards of provers) this sets the standard for drug proving for years to come.

To the practical physician a study of its pages will reveal many new symptoms; and the so-called "physiological" prescriber can now app'y

belladonna with a surer conception of its action.

To our surprise belladonna causes lateral diplopia, sometimes "on looking upward," as well as blurred vision. There is a sensation as though the eyes were uneven, one feels higher than the other; as though they were too large for their orbits; as though they were small, loose in their sockets, were being pushed out, etc.

Many will think the effort expended on this proving is well repaid if only by the addition to our knowledge of the action of belladonna—

that it causes inflammation to the stage of ulceration.

The volume is well gotten up; but we prefer the paging in the old corner, and feel that the value of the book is impaired by filling the left hand page captions with the useless repetition of the name of the work instead of indicating the subject more closely than by the chapter as given on the right hand page.

The Seventh International Homoeopathic Congress at Atlantic City,

September 12, 1906, formally approved and endorsed this book.

No medical library can be complete without it; it should be read by every member of "the dominant school" who thinks that homoeopathists have made no scientific contribution to modern medicine.

Sublamine, as a Substitute for Corrosive Sublimate, has been in practical use for the past five years in Germany. Its principal advantage is that it causes no eczema nor even roughening of the hands. and its penetration is deeper—it does not coagulate albumin. Its tablets dissolve very promptly, and cost but 'ittle more than do those of bichloride of mercury—about  $2\frac{1}{2}$  cents a tablet.

## CORRESPONDENCE.

#### DRUG PROVING.

The chairman of the Drug Proving Committee, 1906, of the County Society of New York (in which proving the physicians of New York and other States were cordially invited to participate) would like to receive the reports of drug provers or to supply new provers with the medicament.

Physicians, students or others who lack the time or inclination for a full proving can, at least, take a few doses, until the direction of the drug's action is obtained, after which it may be stopped.

In this way a valuable amount of corroborative evidence will accumulate.

For a supply of the drug, which is a common plant, address the Chairman, Dr. Shedd, 113 West 71st street, New York City.

In Epilepsy Examine the Nose. One case was cured by removing a shoe button which had there been lodged for over two years.

For Trachoma Apply Locally Sublamine (the sulphate of mercury ethylenediamine) instead of corrosive sublimate; it is more penetrating and about equally toxic. It dissolves in water much more promptly than does the bichloride.

Gradually increasing hoarseness in people past middle age, without definite cause, and with a history of pain radiating to the ear, is suggestive of malignancy.—Am. J. of Surg.

Cystic swellings at the external angle of the eye are usually dermoids. In some cases they communicate by a small opening with an intracranial sac.—Am. J. of Surg.

Non-malignant tumors of the parotid practically never cause pressure effects on the facial nerve. This may be of importance in differentiating them from malignant tumors.—Am. J. of Surg.

# The Homeopathic

# Ege, Ear and Throat Journal.

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#### EDITORIAL.

#### OUR REVISED SPELLING.\*

T is surprising how much misapprehension there is of the movement to simplify the spelling of the English language—even after President Roosevelt's wholesale endorsement of the Board's 300 words and the ensuing publicity.

Ours is a live, therefore a growing, language; its spelling has been slowly taking more definite shape ever since the time of Chaucer, and the process is sure to continue despite the conservatives, but slowly—despite the Board.

The golden mean is a safe course—

"Be not the first to set the old aside, Nor yet the last by whom the new is tried."

The specialists who, in the spirit of the new century, are striving to force a wholesale reform in spelling are enthusiastic and, as such, extremists; but it is apparent that they have laid themselves open to many charges of inconsistency. Their published list really involves many derivatives—enough probably to increase its number by a third, e. g., plow, plowing, plowman.

It is right that papers, journals, etc., should announce their position in this matter and give their reasons.

Our printers have been requested to adopt the new spelling of the two hundred words given below, upon the following grounds:

<sup>\*</sup>Later—Everybody should read Prof. Hugo Muensterberg, "The World Language." in McClure's Magazine, November.

We approve: (1) The elimination of the useless e in such words as judgement, cocaine.

- (2) Drop the u from honour, etc.
- (3) Change the final re to er: meter, meager.
- (4) Drop the ugh from such words as though, thorough.
- (5) Drop the final ue from prologue, etc. (But not from glue!)
- (6) Drop the final me from programme; but make an exception of gramme and its derivatives.
- (7) Change the diphthong æ to e, except in such words as hæmorrhage and homoeopathy, and in Latin plurals, e. g., alæ.
  - (8) Drop the second 1 from distill, dullness, etc.
  - (9) Change the final ence to ense: defense, defensive.
  - (10) Unobjectionable simplifications.

#### OUR LIST.

(1) abridgment acknowledgment adz antipyrin antitoxin atropin ax caffein cocain	develop development domicil duboisin envelop eponym eserin eucain euphthalmin	gelatin glycerin homonym homatropin hyoscin hyoscyamin judgment lodgment pretermit	ptomain scopolamin toxin whisky wo woful
(2) arbor ardor armor behavior candor clamor clangor color colter demeanor dolor enamor	endeavor favor favorite tervor flavor gauge harbor honor humor labor mold molder	molding moldy molt molting neighbor odor parlor rancof rigor rumor savior	smolder splendor succor tabor tenor tumor valor vapor vigor
(3) accouter caliber center fiber liter	luster maneuver meager meter miter	niter ocher reconnoiter saber saltpeter	scepter sepulcher somber specter theater

(4) altho plow	tho thoro	thoroly thru	thruout
(5) catalog	decalog	demagog pedagog	prolog
(6) program			
(7) anapest anemia anemic anesthesia anesthetic anesthetist archeology chimera coeval	cyclopedia dieresis ecumenical edile egis encyclopedia Eolian eon	esophagus esthetic estivate ether etiology hyperemia hyperemic maneuver orthopedic	paleography paleolithic paleontology paleozoic pedobaptist pretermit questor subpena philopena
		•	wilful
(8) caliper distil	dulness fulfil	instil	skilful
(9) defense	license	offense	pretense
(10) apothem bans bark brazen brazier bus bur check checker clue controller coquet cue	cutlas dactyl dike dispatch draft dram epaulet fagot gazel gipsy gloze harken hiccup	hock hypotenuse lacrimal licorice mama mullen omelet parafin pigmy pur quartet quintet raze	septet sextet silvan simitar sithe stedfast sumac teazel wagon woolen
cue	hiccup	raze	

And their derivatives.

We can not believe it necessary, advisable or defendable to change the final ed of the past participle to t. Past and mist would then serve to create more confusion than simplification.

Nor do we consent to change the final ise to ize; why should we spell surprize and surprisal, catechize and catechism?

If we are to do away entirely with ph and substitute f-as in the pro-

posed sulfur—let us be consistent and have no exceptions to that. But we are not asked to spell phosphorus with two fs—and can not be induced to do so, because that would involve such widespread changes in the alphabetical arrangement of that and similar words. (By the way, why are we not asked to drop the e from arrangement?) The Board's enthusiasm seems to have run away with its judgment in the recommendation that guild be spelled without the u—this would create an exception to the rule that g is soft before e and i, thus causing more confusion than relief. The effort to substitute z for s where the latter letter is sounded like the former seems unnecessary, and is not thoro enough to afford sufficient relief or to inspire confidence; it is open to too many charges of inconsistency. Changes based upon pronunciation are dangerous. Thousands, in fact millions, of people habitually drop the final g from words ending in ing; will the advocacy of this be the next step?

With all their anxiety to elide silent consonants we are not asked to drop the c from scepter while changing its final syllable. Why make two bites at the change? Two changes are made at once in maneuver.

In our judgment it is better to preserve the French spelling of Gramme; this in order to obviate confusion between the in of grain and the m of gram. Many prescriptions are written so carelessly that this proposed spelling might cost one or more human lives—it is not worth the risk!

Diphthongs are going out, but we stand strongly for two exceptions: the æ in hæmorrhage, and other words derived from the Greek haima (blood), and the œ in homoeopathy and its derivatives.

The former to avoid confusion with hemi-half.

Spelling homoeopathy without the diphthong is virtually (it will eventually have such tendency) a lowering to a greater or less extent of our banner. Homoeopathy is derived from the Greek homoios, which means "similar," and pathos, disease. Omission of the oi indicates the Greek homos, which means 'the same." With the diphthong the word will continue to tell in no doubtful terms what it means. Instead of coming down to the level of the ignorant let us educate them to this extent, at least. As a reductio ad absurdum the proposed (we will not call it the new) spelling might embarrass a reader who finds himself obliged to change his pronunciation and conception of the word which at the end of a page reads "home" and is completed over leaf with "opathy."

# SOME EXCELLENT REMEDIES IN THE TREATMENT OF CATARRHAL AFFECTIONS OF THE RESPIRATORY PASSAGES.

THOMAS L. SHEARER, M. B., C. M., EDINBURGH

Baltimore, Md.

T is only fair to the members of this society to state that, in this short paper, I have no intention of inflicting upon them an enumeration of all the various remedies, with indications, that may be employed in the treatment of catarrhal troubles; but I merely wish to bring to their notice a few medicines whose action is almost specific in certain conditions of the air passages. Nowadays so much time and space are devoted to these on the surgical treatment of nasopharyngeal disease and so little thought apparently given to the medicinal part of the subject that it seems only proper that we roam a bit in the latter field. Naturally where one encounters adenoids, nasal growths, pronounced septal deviation—with or without spurs—that obstruct nasal respiration, or any of the other pathologic states that require surgical interference, that treatment should be carried out; but one should protest against wholesale removal of little spurs whose only offense is that they exist in a breath way without causing any obstruction to respiration, and against a dozen other minor conditions of a trivial nature which are detected by the searchlight eye of the most enthusiastic rhinologist. Had nature intended us to cut all of these trifles away we would have been born with a saw tied to our necks for the purpose. This state of affairs is a crying evil, and is well named by Sir Felix Semon, of London, "the lust for operation." Excluding, however, the cases that really require operative interference, one encounters occasionally instances in which a simple catarrhal process exists, in which the patient complains of an obstinate postnasal discharge of clear mucus, or of a discharge—either bland or offensive—from the nostrils, and which can not be traced to any particular sinus; it is to a remedy for such conditions that your attention is first asked. It is a curious plant and is obtained from a strange locality, it bears the name of

## LEMNA MINOR.

Dr. Robert C. Cooper, of London, in 1894 was the first one to experiment with it and to describe its sphere of action; strange to sav it has not become as well known as it deserves. The plant is a form of the lowest phenogamous vegetation. It consists of lenticular floating fronds composed of stem and leaf together and bearing the flowers in slits in the edge. It forms the green scum found on stagnant ponds and dykes. It is found in two varieties, the lemna minor and the lemna gibba. The special action of the plant is upon the nostrils—the Schneiderian membrane. Its most striking indications for use are either a putrid smell in the nose or a loss of all sense of smell or taste, and a putrid taste in the mouth, especially on rising in the morning, with a general foulness in the mouth, due apparently to the dropping down of impure material from the postnasal region. "Along with this there may prevail a disposition to noisy diarrhea." The patients have their symptoms aggravated in damp and rainy weather. At times pain in the eyes during heavy, rainy weather, with drowsiness during the daytime and restless sleep at night exists, and the pallid, dullish, sickly look in the face so often associated with long standing infection from nasal catarrh is also present. Lemna will relieve both of these symptoms. In atrophic rhinitis, where the crusts and muco-purulent discharge are abundant with fetor, its action is very marked. It modifies the secretions to such an extent that we can the more readily improve the condition of the nasal chambers with the aid of local measures. Whether the remedy has the power to either prevent or even retard the process of atrophy itself remains to be seen. In another class of cases in which general turgescence due to swollen, relaxed turbinates blocks the nostrils completely, lemna surpasses the action of any other remedy. Again, we have all encountered instances of nasal polypi that, in spite of the most thoro repeated surgical removal, insisted upon fresh forma-That most characteristic feature of nasal polypi—the tendency to swell up in damp weather and thus further hinder nasal respiration -is relieved in a wonderful way by lemna minor. It does not either kill, cure or in any way get rid of the growths, but it diminishes their succulence and thus reduces their volume and also lessens the influence of wet weather to which such subjects are prone, and this is no small boon, as most of us know after repeated failures with remedies like calcarea carbonica and teucrium marum verum-so highly recommended for this condition. In cases suffering from simple, glairy mucoid postnasal discharge, and where no surgical treatment is indicated, lemna is invaluable. Again, after operation on the nose and throat, where some discharge still persists, this remedy should be given a trial. This latter remark also applies to sinus disease, in which, as in the antral form, the fetor is so annoying. In acute coryza lemna often acts very well by reducing the swollen turbinates, but its sphere of action is essentially in subacute and chronic conditions. An important point concerning this plant is the question of size and the frequency of dose. Cooper prescribed the tincture, while Burnett preferred the 3x dilution. From considerable experience with it I am inclined to recommend either the Ix or 3x dilution; preferably the Ix dilution if it does not produce twisting intestinal pain and diarrhea. Where such secondary effects do follow its use or where the pharynx is already too dry, the 3x dilution is best. Five drops in a spoonful of water night and morning is the usual method of administration. In very profuse discharges-nasal or postnasal-the remedy can be taken three times daily. Great care must be taken to insure reliability of the preparation.

#### APOCYNUM CANNABINUM.

This remedy—comonly known as Indian hemp—is an excellent agent in cases of chronic nasal catarrh with a tendency to acute stuffiness, complained of especially at the bridge of the nose, with thin, watery or thick yellow discharge, and where the memory is dull and sluggish. The discharge seems to be derived from the nasal mucous membrane itself, and is not, apparently, of sinus origin. Dull headache is often present. It acts well in people whose nostrils become congested and blocked up easily, who take cold readily. The dose is five drops of 1x dilution twice daily in subacute rhinitis, or only once daily where the medicine is taken for months in order to overcome the tendency to attacks. Another remedy which does very good work in acute coryza is

# MERCURIUS BINIODATUS CUM KALI JODATUM.

For many years I have prescribed this preparation in the 3x trituration for the common head colds where the patients were very susceptible, and where they desired to take with them while traveling from home some medicine upon which they could rely. As it acts upon the nose, ear and nasopharynx it covers a great deal of ground. The directions usually are to take two tablets every one, two or three hours, according to the severity of the symptoms, and as the discharge lessens, take a dose three times daily until well.

As a digression, I may mention that where a person is suddenly attacked by such a violent coryza as to necessitate the actual holding of the handkerchief to the nose to catch the profuse, watery secretion, and when such an individual has to fill a dinner engagement in, say, two hours, something that acts promptly is not only indicated, but expected by the patient. To meet this demand codein sulphate tablets, each containing 1/4 grain, can be administered with confidence as to the result. It has been my rule to give two tablets onehalf hour before dinner, and one more tablet just as the person leaves his house for his destination. Of course, the tablets act just as well if the dinner is not forthcoming. The initial effect being produced, the double iodide tablet should promptly follow until the cold is relieved. Many people claim and believe that head colds represent uric acid outbreaks or storms, the resulting high arterial pressure being relieved by engorgement of the nasal mucosa and free watery osmosis. However, that the average coryza is of infectious origin is clearly proved by the experience of the exploratory expedition, some years ago, to the Antarctic regions, where the party spent three years. Only twice during this long period did influenza attack the crew, and on both occasions the epidemic followed immediately upon the opening of a trunk or box of clothing that had been closed since it was packed in England. The last of the four remedies to be mentioned in this paper as a catarrhal agent is called

#### MYRTUS CHEKAN OR CHEKEN.

Its habitat is in the vicinity of Valparaiso, and extends thence northward into Bolivia and probably Peru. In Chili its favorite place is the sandy river beds at a small altitude, with the boldo and the swampwillow for its ever present companions; but, as it passes northward into a warmer climate, it is forced upwards on the mountain slopes, until at La Paz we find it growing at an elevation of some 10.000 feet. The mountain variety on the slopes of Bolivia rarely reaches a height of more than five feet, and is of a denser and more shrubby growth

than the plant which occupies the lower level. This latter variety often attains the proportions of a tree, being twelve to fifteen feet in height. The leaves of the mountain plant are smaller but broader and thicker and more abundantly furnished with oil glands, which protect the plantduring the long continued and very severe drouths. This character adds materially to the medicinal activity of the highland leaf. constituents and properties of chekan correspond with those which generally characterize the family myrtaceæ. To this family belong the cloves, allspice, eucalyptus and jambul-all possessing, in the part used, stores of aromatic oil to which, at least in great part, is due their valuable properties. Dr. Dessaur, physician-in-chief to the German hospital in Valparaiso, and Dr. Murrell, of London, both were instrumental in introducing this remedy to the profession. Dr. Dessaur first had his attention called to the plant by the successful self-treatment by one of his patients in a case of purulent bronchitis. He then tried the chekan on members of his own family with equal success. Dessaur considers it to possess tonic, expectorant, diuretic and antiseptic properties; he states that he has used it with great succes in bronchitis, vesical catarrh and other affections of the mucous membrane; also that the digestion is improved. Chekan has done its best work in cases of chronic bronchitis, associated with emphysema, particularly in elderly persons suffering from "winter cough." As an example of this reference is made to Murrell's report of fifteen cases of chronic bronchitis which were treated at the Royal Hospital for Diseases of the Chest, London. All of the patients, with one exception, were men. The age of the woman was 51 years, the ages of the men ranged from 36 to 58 years. They were all bad cases, most of them of many years' duration. Most of them had been attended at the hospital for some considerable time, and almost without exception they had in former years undergone much medical treatment with comparatively little benefit. Their occupations exposed them to cold, wet and draught, and in some instances they had the additional disadvantage of working in a dusty They complained chiefly of paroxysmal cough, with atmosphere. thin, yellow expectoration and much shortness of breath on exertion. On physical examination of the chest emphysema was detected, with or without a little ronchus of the bases behind. They were, in fact, ordinary cases of winter cough. Acting upon this report and on that of Dessaur, I have employed chekan in my own practice for some years. The chief indications for its use are severe paroxysmal cough with

dense vellow, sticky expectoration, which is difficult to "bring up." Sometimes the secretion is so abundant that it rattles in the deeper bronchial tubes, but owing to its tenacious character only small amounts are expectorated. Shortness of breath is also a marked feature, but the cough is the more important of these two symptoms. Chekan is offered for sale in the form of the fluid extract of the leaves, and as such is prescribed by Dessaur and Murrell in doses varying from 5i to 3ss three times daily. Judging from Murrell's reports one obtains the idea that he is trying how large a dose the human stomach can bear without inducing nausea. Such doses are, of course, from the standpoint of any school of medicine simply instances of drugging. All the good results, without even any personal inconvenience, can be obtained by much smaller doses. Parke, Davis & Co. have manufactured for years an excellent fluid extract of chekan. With this preparation it is only necessary to add nine parts of alcohol to one part of the extract to form the 1x dilution; and of this dilution to prescribe, say, ten drops in a spoonful of water or on a lump of sugar every four hours. Where the secretion is very small in amount, ten drops of the pure extract every four hours may be administered; its direct expectorant effect is produced more quickly in this way. However, I have seldom found it necessary to do this as the Ix dilution is sufficiently active. remedy is not a cure for all forms of bronchitis, but in those cases which present at least the symptoms "thick, yellow, sticky sputum, difficult to expectorate" good results may be anticipated from its use. In all old people who suffer from weakened power in expectoration and inability to thoroly clear the bronchial tubes Myrtus chekan is most reliable. It is a source of regret that time does not permit a consideration in this paper of other remedies which act in a most interesting way on the air passages.

#### DISCUSSION.

GEORGE B. RICE: I wish more of us had the courage to place unaided dependence upon the indicated remedy as has Dr. Shearer. There are many reasons why we, as a class of specialists, neglect the indicated homeopathic remedy. It is not necessarily lack of faith in the law of similars, but it is because it is so difficult to select the proper remedy for the given condition. There is such a large opportunity for failure that we resort to surgical and local methods oftentimes when this is not the wisest course to pursue. Men of a mechanical turn of mind like to witness quick and positive results which come from surgery,

notwithstanding the fact that better results might be obtained in a longer and more gradual manner by the use of the remedial treatment provided the proper remedy could be selected, results which, perhaps, would be more lasting and more in accord with nature's efforts to cure disease.

Two of the remedies Dr. Shearer has named, lemna minor and myrtus chekan, are entirely unknown to me. Apocynum cannabinum and mercurius iodatus cum kali iodatum I have used, of course, with more or less frequency.

I wish I could discuss Dr. Shearer's paper more intelligently and from the standpoint of experience. I can only say that I believe Dr. Shearer's contribution is an extremely valuable one, and that I shall at the first opportunity use the remedies he recommends according to the several indications, and hope that at the next meeting of this society I shall be able to confirm Dr. Shearer's statements from actual clinical experience. Dr. Shearer is to be congratulated for showing us the way to a larger and broader view of medical practice.

Two or three years ago I had the honor of presenting to this society a report of some cases I thought had been cured by the single homoeopathic remedy. One of these remedies was nitric acid, and the other mag. phos. I still think that nitric acid did cure a case of nasal inflammation associated with polypoid growths, but this experience has not been repeated, I am sorry to say. The other remedy, magnesia phos., I am using constantly. Patients who are subject to spasms of the glottis, sensations of roughness and constriction in the throat, spasmodic coughs coming on in paroxysms without expectoration, worse on lying down, are, as a rule, benefited, and in many cases cured by mag. phos.

Enlargement of the lingual tonsil will produce symptoms which are almost identical with those indicated by mag. phos. An elongated uvula will bring about the same set of symptoms. It even happens, when such a cough is mechanical, that the cough habit has been established and will not be relieved by the removal of the mechanical cause; here mag. phos. does good service.

here mag. phos. does good service.

John B. Garrison: The members of this society are to be congratulated whenever any one writes a paper giving homoeopathic indications for the use of drugs and giving illustrations of their successful administration. The tendency is for us to drift away from the use of internal medicines and to rely, more than we ought, on the use of local and surgical measures in cases where a study of the case would in many instances show us how to prescribe and lead us to results that would please both our patients and ourselves, and give a much needed encouragement to our school of medicine.

The remedies that Dr. Shearer calls our attention to in his paper are all deserving of thought in cases such as he refers to. and have been able to do excellent work in curing cases where they are properly indicated.

Lemna minor, the common "duckweed," is indeed a very valuable remedy in cases of nasal obstruction where the tissues are inclined to be "soggy," and in cases where it has been used for that purpose, it has seemed to cause the contraction of polypi, so that respiration became easier, where the aggravation was always during damp, rainy weather, which seems to be a reliable indication for its use. The same indication applies to other cases of nasal obstruction. If the patients are always worse during damp weather, you may be sure that lemna m. will be of service. Regarding the dose, we all have our ideas in that line, I suppose, but I believe that we should use the remedy to the best advantage by giving it in the dilution least liable to produce an aggravation and also to stop giving the remedy when a favorable action is observed. I have used it in the tincture and various potencies, and believe that the sixth centesimal potency will act as promptly as those of the lower. It is worthy of a thoro proving, and some day it will have it, and will then, perhaps, show new fields of usefulness.

Apocynum cannabinum I have to confess that I have never made use of in the conditions that Dr. Shearer recommends it for. I find that an indication for its use is "continued and violent sneezing" with the increased nasal discharge; and the bewilderment of the mind and the heaviness of the head, aggravated in the morning, should be borne in mind when we select our remedy, and we should not forget that the remedy has the symptom of a somewhat peculiar morning vertigo, coming and going at intervals. It should help us in relieving those

ever-present nasal catarrhs.

Mercurius jodatus cum kali jodatum. The iodides of both mercury and potash are not new to us in the treatment of catarrhal diseases, and have won laurels where they have been prescribed on reliable indications. Hale, I believe, was held liable for the introduction of the salt formed by the chemical union of one equivalent of the red iodide of mercury and two equivalents of iodide of potassium, and there is no doubt but that it is a potent remedy for the cure of the conditions written of by Dr. Shearer. The use of it is empirical as it now stands, and it is unfortunate that we have no accurate data upon which we can be guided in its selection. Dr. Havnes has used it successfully in the 6th potency in a violent attack of catarrhal fever where there was a coryza similar to euphrasia, a headache very much like that of bryonia, only it was not aggravated by motion; throat sore; muscular soreness all over the body; throat and mouth filled with mucus. One grain of the 6th trit. in half glass of water, a teaspoonful taken every two hours, effected a speedy cure.

Myrtus chekan, from its relationship, should prove a valuable remedy in bronchial catarrh. Myrtus communis, the common myrtle, was thought highly of by Hering, who made clinical tests with it and found it to be useful in pain in the upper left lung, going right thru, from front to the back, under the left scapula. "Great lassitude in the

afternoon" he considered a very important symptom.

In using the Myrtus chekan I should advise the tincture made by Boericke & Tafel, on general principles, as being more sure of receiving a genuine article and best fitted for our use.

Dr. Shearer is doing service to us all by his investigations in these rare drugs, and his clinical observations can be borne in mind for veri-

fication by the members of this society.

Camphor and Coffea stimulate the heart; they do not depress it.

Digitalis lowers the peripheral resistance.

Glonoin also causes a fall in the blood pressure.

For sciatica try viscum album.

Iodide of Soda for the rash (acne. etc.) of rheumatism and gout.

Arterial Disease After Adrenalin Injections. It has been found that the intravenous injection of adrenalin in rabbits may be followed by extensive change in the aorta and the larger vessels. This has been determined to consist of a localized destruction of the smooth muscle fibres of the media, accompanied by a rapid calcification and other characteristic alterations in the elastic-tissue elements. This results in a narrowing of the lumen of the vessel and a diminution in its elasticity which is subsequently followed by a compensatory new growth of elastic fibres and of muscle and endothelial cells in the intima. Finally there is produced as the net result of these changes a series of aneurismlike bulgings of the vessel wall. The adventitia and the vasa vasorum do not seem to be involved in the process at any time. Erb who presents a very interesting communication on this subject in the Arcihv fur experimentalle Pathologie und Pharmakognosie, Vol. 53, 1906, claims that these findsings show there is no actual similarity between this condition and the arterial sclerosis which is found in the human subject. There s no sclerosis in the sense of a thickening due to proliferation of the intima nor an atheromatous process. But there is apparently an analogy between the condition described in the rabbit after intravenous adrenalin injection and the calcification of the media as found in the large arteries of the extremities in fan. Erb believes that this vascular disturbance is not due eo an increase in blood pressure or to nutritive changes brought about by spasm of the vasa vasorum, but is due rather to a direct toxic effect of the adrenalin on the smooth muscle cells of the vessel wall.—Medical Record, October 20, 1906.

# THE LYMPHATIC SYSTEM AND DISEASES OF THE EYE.

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N the practice of medicine more and more attention is being given the remote causes of disease. Factors, hardly considered formerly, are now counted all important. It is possible the analytical method now in vogue may at times lead the profession to wrong conclusions; the processes of human reasoning, instead of enlightening, sometimes tend to obscure a given problem. However, it is certain that increased knowledge of anatomy, of histology, and particularly of physiology, has assisted the profession to interpret rightly the symptoms of disease and to appreciate the pathological changes incident to nt. We will never, I fear, be able to say to every patient, "Your case is curable," but of every disease we may hope to say, "It is curable." At least, there should be such progress in our science that every pathological condition, or group of abnormal symptoms, shall have been given such individual study and such discriminating application of treatment as to demonstrate its curability. Unfortunately, idiosyncrasy or individual peculiarity, ad infinitum, will rob the profession of the joy which comes of an exact science. I am not sure, however, but any condition we describe as "idiosyncratic" may be more than a modification of simply the ordinary form of the given disease. Possibly we are hiding back of this term the failure of complete and perfect study of a pathological condition essentially different from the disease it appears to be and from the typical form of which it but slightly differs. The history of medicine is pregnant with the changes in thought relating to almost any given disease. As the science has progressed, there has been increasing necessity for reclassification, especially in the division and subdivison of disease. Conditions once classed as identical are now considered to be materially different. The sciences collateral to medicine, especially those which make use of the microscope and testtube, have so illuminated the hidden mysteries of the past that more perfect knowledge is possible. It should be so, because once a profession stands still, soon it must deteriorate. Activity and life are synonymous terms, and it is gratifying that medicine has been thoroly awake to modern progress. Indeed, the physician must needs be a mental acrobat, almost, to keep abreast of all the advances made in this profession.

I have thought, sometimes, that ophthalmologists are so busy in the practice of the specialty that undue attention has been given to practical things, to the neglect, perhaps, of careful study of obscure problems. If this be true, not enough consideration is accorded the underlying, possibly remote, causes of conditions daily met and treated in the most routine manner.

Without further generalization, I desire to mention one condition which, in my opinion, has been treated with such indifference. I refer to that abnormal condition of the fornix conjunctivæ characterized by the presence of granulations or follicles. Not alone in the so-called follicular conjunctivitis is the condition met, but, besides, in my experience a number of cases have presented where the fornix was red, swollen and even indurated, while the palpebral and ocular conjunctiva were apparently normal. For the purposes of this discussion malignancy must be eliminated, because the condition in question is one which entirely disappears without or in spite of treatment. Dusty places, for instance, produce a conjunctivitis in which there may be slight evidence of disturbance except in the considerable amount of swelling at the fornix.

Undoubtedly the majority of mankind escapes trouble of this sort because the lachrymal secretion washes away most of the dust particles, many are disposed of by the wandering cells from the conjunctiva, but some of these laden cells, no doubt, in the process of phagocytosis pass through the lymph channels to the lymph glands. Here they are arrested, and by a filtration or other process the blood and general system are protected from invasion. Certain bacteria, too, are probably destroyed and possibly toxins or similar irritants are so modified chemically by the lymph as to become harmless.

In most cases when the tissues at the fornix are swollen, red and tender, the condition is physiological rather than pathological, and, in my opinion, is not indicative of meddlesome local interference. It should warn the oculist to inquire carefully into the general surroundings, occupation and habits of the patient. Should this examination reveal habitual exposure to chemical or mechanical irritation, such as may

arise from dust, smoke or vapors, or to the possibility of bacterial invasion, the proper advice is obvious. The special susceptibility of some individuals to bad effects from unhygienic surroundings may be explained by the presence in these persons of larger lymph channels, giving more ready access to the lymphatic system.

It seems to me that treatment should be directed:

Firstly, to the removal of the patient from improper surroundings and the correction of any remote disturbance, as, for instance, disease of the lacrimal apparatus, nose or accessory sinuses.

Secondly, to the employment of mild, unirritating, germicidal lotions, provided the condition be secondary to some bacterial invasion of the conjunctiva.

Thirdly, to the building up of the patient in order that his powers of resistance may be increased.

In the treatment of this condition various measures have been recommended. Ointments, lotions, electricity and surgical interference are advised by different authorities. Are these, or is any one of them, the indicated treatment?

As a boy, in the old church, I used to hear the hymn, "God moves in a mysterious way His wonders to perform." So in the human body there are some things almost mysterious about the action and reaction of the different tissues. Here is one, for instance, which is behaving peculiarly. For some known or unknown cause a mass of swollen and inflamed tissue has taken the place of the elastic and loose normal fornix. There is a doubt in the mind of science whether or not the lymph follicle is normally a constituent of the fornix. There seems to be perfect unanimity of belief as to the presence of lymphoid tissue in pathological conditions of this region. Undoubtedly the swollen and indurated tissue is the result of overactivity of the lymphatic system. For some reason, unexplainable perhaps, the glands have been called upon to filter out or to dispose of certain bacteria or toxins. Without the intervention of these watchful organs the general system might become the victim of the poison. Is it good treatment, therefore, to reduce blood supply by the application of astringents, to irritate already overactive tissues by the use of stimulants, or to force the poison into the general circulation by puncture or scarification? What, then, is the proper treatment?

The common sense of Samuel Hahnemann is frequently a matter of comment in homocopathic circles. So many times he warned the pro-

fession that each part of the body is but a section of the whole, that the patient and not the disease should be treated. I can think of no one situation in all ophthalmology where, in my opinion, this advice is more applicable. Here is a patient whose lymphatic system has been called upon to fight against infection. The danger signal warns the body that its powers of resistance may be called upon to resist the invasion of a foe. Its general well being must be such that these overworked lymphatics may be nourished and sustained, thus giving strength to overcome the enemy. In my opinion, therefore, the treatment of such a case should be general, so far as remedies go, and what is more important, largely hygienic. Rest, freedom from dust and winds, mental quiet, nourishing food at frequent intervals, and constant out of door life are the secret of cure. Exactly the same treatment recommended these days for the incipient tubercular patient is the treatment which will most speedily triumph in this condition.

In my opinion the lymphatic system has been neglected, by the ophthalmologist especially. This rather general paper has been presented in the hope that there may be some discussion and consideration of the importance of the lymphatics as they relate to the eye and its welfare.

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#### DISCUSSION.

E. W. Beebe: The discussion of a scientific paper of this character from the pen of an author of acknowledged ability for delving deeply for etiological factors in the production of disease, requires one better versed in histology, physiology, and, indeed, in all the collateral sciences than is the writer, and why our worthy president should have thought best to select one from among the oldest members of the society to discuss such a very modern topic is not plain to the writer, and if he expected to find in me one capable of discussing the pathological and etiological conditions of the disease mentioned in this paper by reason of much investigation and research along these lines, he certainly made a grave mistake, and will surely meet with disappointment.

The paper is to be commended on general principles, opening as it does a comparatively new field for study and investigation, and our society is under obligations to Doctor Copeland for presenting such an

interesting theory on the subject.

Theories are frequently of great service in the discovery of truths, tho ultimately they may be proven faulty or even untrue themselves.

It is only by free discussion and much painstaking investigation that hidden facts are brought to the surface and progress made in the elucidation of them. With this thought before us I trust I may be pardoned for kindly

taking exceptions to some of the author's conclusions.

It does not appeal to the writer that conjunctival diseases have been treated with indifference by the profession, indeed it is probable that they have received more than their share of attention by writers of distinction. The very fact of its stubbornness has probably been the stimulus for increased attention and study of this particular form of the affection, and its etiology has been long and persistently sought. That this has been done without promising results up to the present must be admitted, and he will indeed be a benefactor who can make plain its etiology, and incidentally suggest a method of treatment which shall be more successful and acceptable than that now in use.

It is believed there is much which might be said in opposition to Doctor Copeland's theory, which he has so cleverly presented to us.

some points of which I will briefly mention.

He says it is undoubtedly a fact that some of these dust laden cells, in the process of phagocytosis, pass through the lymph channels to the lymph glands, and that here they are arrested, and by a filtration or other process the blood and the general system are protected from invasion. and that certain bacteria, too, are probably destroyed, and possibly toxins, or similar irritants, are so modified chemically by the lymph as to become harmless.

In the absence of the knowledge of what actually does take place under such conditions, it is but natural that we should cling to that theory with which we are most familiar and which appeals most strongly to our judgment from our understanding of analogous subjects, and as a consideration of the topic under discussion must largely be speculative at the best it would seem more plausible to the writer that if toxin germs from the air or otherwise do enter the lymph channels via the conjunctiva, they would be likely to find lodgment in the lymph nodules while on their way to the thoracic duct, and there set up inflammatory action or infection from detention rather than in the conjunctival membrane, where there is little hindrance to their progress. And if it be a fact that the toxins are arrested in their progress by the lymph glands, how are they disposed of thereafter? Naturally we would expect they would enter the circulation through the capillaries by absorption, which would hardly be conceded to be a protection to the general system.

In the brief period which the paper has been in my possession I have not been able to ascertain that it is a function of the lymphatics especially to prevent or ward off bacterial disease, or to neutralize toxin germs, by either chemical or inhibitory action, and from the composition of the lymph I hardly think it could be expected. We do know they have absorbent powers; therefore, does it not seem more likely that they would in this manner assist in relieving swollen or hyper-

trophied tissue of the conjunctiva rather than otherwise?

I fully agree with the atuhor that granular or subacute inflammations

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of the fornix are often stubborn, and in some cases notably incurable by any known method. I long since found by experience that the caustic or semicaustic local application, like the various ointments of mercury, silver nitrate, sulphate of copper, et cetera, are of questionable value in the management of these cases, whatever the cause.

If I interpret correctly the ideas which Doctor Copeland wishes to convey, he would do away, not only with these, but all stimulating collyria as well, and rely largely upon the selection of the internal remedy to cure such cases. If such are his ideas, I must differ with him again in this particular, for I firmly believe that the great majority of such cases are more successfully treated by carefully selected local

treatment than it is possible to do by any other method.

I have so frequently been disappointed when attempting to cure such cases by the administration of internal remedies, that I have become impressed with the idea that the indicated remedy is seldom, if ever, found for such cases, particularly so in those which are not uncommon, where the patient is to all appearances in perfect health save in this particular. In such cases what can be expected from the administration of attenuated medicines? Nothing. I am of the opinion that homeopathyy is applicable only to the curing of the sick, and it will require a stretch of the imagination, I believe, to pronounce a man sick by reason of his having a conjunctivitis of the type under consideration.

If, as is frequently the case, our patient is suffering from some form of chronic systemic disturbance in conjunction with a conjunctival disease, then it is eminently proper to prescribe homocopathic medication for the same and when the drug prescribed covers the majority of the symptoms we may expect relief from the conjunctival disease as well.

but it does not always follow that it will.

Chronic hyperemia of the conjunctiva is often an accompaniment of catarrhal conditions of the nasal passages, or is the sequela of the exanthemata, or the residium of an acute conjunctivitis, and those employed, as suggested in the paper, in smoky, dusty or vitiated atmosphere are most often victims of the affection, and very frequently it is found in patients with uncorrected ametropia or muscle unbalance. In all these conditions hygienic treatment, correction of muscular deviations and abnormal refractive errors will, in the opinion of the writer, prove of greater benefit than treatment by any other methods with which I am familiar.

It is very probable that wherever found and whatever the cause, careful prescribing for general conditions, correcting unhygienic surroundings, and the local use of mild stimulating, germicidal or astringent drops will be found of benefit in most cases of granular or follicular conjunctivitis, and I believe this is in general the accepted opinion of the profession to-day.

It is possible, as was suggested, that the lymphatic system has more to do with the disease in question than it has been credited with, and I am not prepared to say it does not, but it is the theory of Doctor Cope-

land as to how this is accomplished, which does not appeal to me, and as it is probably undemonstrable, it will require much pains-taking observation before the question of its great importance will be satisfactorily settled. May it be to his credit to be able to defend his position by showing our deductions to be in error.

It is a very old theory that vitiated blood is the cause of not only chancre but a great variety of other diseases, conjunctival as well, and many and various are the methods which have been suggested to renovate it, and it is needless to say that this theory has many faithful adherents to-day, however questionable the methods used to purify it.

It is conceded. I believe, that there is practically no difference between the composition of the lymph and that of the blood, save in quantitative proportion; one prominent authority having expressed his convictions in this respect in the following language: "It has been inferred that lymph is nothing but that part of the blood which has escaped, leaked out, so to speak, from the vascular system into the surounding tissues, and which is afterwards soaked up by the lymphatics."

If such be a fact it is possible that the lymphatics like the blood vessels may have much to do in a general way in alleviating these

cases, but probably not in the manner suggested.

DAVID W. WELLS: Concerning the diagnosis of disease of the fornix conjunctivæ there seems to be a great deal of confusion in the minds of the profession. While well marked cases of trachoma are plain enough, in some localities the condition of slightly raised follicles of the lower cul de sac is also classed as trachoma. My attention was called to this by Dr. Norton a year or more ago when together we visited the New York Eye and Ear Infirmary. We watched the examining oculist treating the new patients, and I, at least, was surprised to see what I should have called follicular conjunctivitis of the lower lid classed as trachoma, and treated with the routine bichloride solution.

As Dr. Copeland says that "All malignancy must be excluded," I assume that the particular lesion described by him must be something different from that. I do not remember to have seen any of the type to which he calls attention, where the "fornix was red, swollen and even indurated, while the palpebral and ocular conjunctiva was apparently normal."

I suspect this may be due to my limited experience and carelessness of observation, or else I have classed them as trachoma, which, if I understand the meaning of the word, is certainly malignant. While I am, therefore, not competent to discuss his views with special application to this particular condition, I infer that his theory of the physiology of the lymph and the lymphatic glands applies with equal truth to many other pathological states.

I assume that it is established that the function of the lymph is that of a "middleman." The blood stream conveys the nutrient particles to the vicinity of the tissue to be nourished, but the individual cells are reached only by the lymph which takes this nutriment from the blood

and bathes the cell therewith.

We are also taught that the lymphatic glands act as traps in which deleterious substances and pathogenic bacteria are treated to a process of phagocytosis. All this the essayist has very well expressed.

I heartily agree with his word of caution lest by our efforts to do something we interfere with this normal function. It is undoubtedly true that the condition which we try to combat may be nature's method of cure, just as fever is a process of burning up noxious substances.

The relief in iritis by the artificial chemosis of dionin suggests that we are here imitating nature, and that instead of regarding chemosis as an untoward symptom, we should feel that it is an evidence that the organism is putting forth strenuous efforts, perhaps called for only when the lesion is serious.

When we understand the nature of disease we shall perhaps be able to help more intelligently, but till then we should be guided by one great watch word, "Do no harm."

I think the essayist is right in questioning the utility of the routine use of irritating astringents. Attention to hygiene and the removal of the patient from an unhealthful environment we all know to be of greatest value, but I confess that this strong presentation has brought home to me my frequent neglect of the patient and assiduous treatment of the disease.

I recall in this connection a case of recurrent ulceration of the cornea which I treated for several months with collyria. unguents, indicated remedy, mercury and cod liver oil. Finally I did what probably should have been done first, sent the patient out into country, stopped all medicine, and in a month she came home well, and so far as I know, there has been no return of the trouble.

The problem of the future is the meaning of two words—suscep-

tibility and immunity.

R. S. COPELAND: I do not know how common are the cases I tried to describe in the paper. Personally, I have seen in the last year a dozen cases in which there was no conjunctivitis, but in which there were redness and swelling, especially of the fornix. I remember one case occurring in a man who was working constantly in a dusty place. He had this condition in the right eye for a number of months, although it had been treated in the usual way with astringents. He was relieved, not by any internal treatment, but by proper attention to hygiene.

Some study which I have given the problem of tuberculosis has made me, I believe, a better ophthalmologist. Many chronic cases that were incurable in my hands formerly have become very simple problems since I have made it a rule to inquire closely into the habits of my patients. The average individual in our crowded cities lives in a room with no air, no ventilation, without sufficient exercise, and his eye troub-

les receive constant irritation from an unhygienic life.

I recently had under treatment a little baby with phlyctenular keratitis. I found the child was kept in unsanitary surroundings. When sent

out of doors to live under the apple trees for two weeks, the babe became just as well as I am. In these cases, spoken of in my paper, of involvement of the fornix with swelling and redness, I do not believe the ordinary local astringent treatment will cure. It is not good treatment. The first consideration should be the hygienic surroundings of the patient. I have had a number of such cases which were very puzzling to me until I examined more closely into the subject of their hygiene, when they yielded to treatment such as I have indicated.

Alypin: Its Use in Ophthalmology. Wenstaetter (Muenchener medizinische Wochenschrift, October 17, 1905). As to the anesthetic properties of the drug, Wenstaetter's observations are somewhat at variance with those of Impens; the latter achieving complete anesthesia of the cornea with a I or 2 per cent, solution, while Wenstaetter, in some cases was compelled to use 5 and 10 per cent. solutions. Five per cent. solutions were often found inefficient to remove foreign bodies from the cornea, and at no time did he see the complete anesthesia which follows cocain. Nevertheless he admits it has properties which make it superior to cocain, in that no pupillary disturbance is produced, it is less toxic and it is cheaper. Wenstaetter also reports favorable results from its use in hay fever, its nontoxic properties permitting the frequent use of the drug. Not interfering with the size of the pupil, alypin may find a place among the therapeutic measures for glaucoma.

Experimental Studies in Regard to the Action of Fowler's Solution of Arsenic on the Ear. Albert Blau (Archiv. f. Ohrenheilk. Runde, July 31, 1905). The author administered poisonous doses of Fowler's solution to six white mice and three guinea pigs. They were killed, the heads were then hardened in formalin and mounted in collodion. After examination his conclusions were as follows: Arsenic certainly produces distinct changes in the nervous labyrinth parts. Because of the absence of other changes in the labyrinth we must conclude that the rarely observed clinical disturbances, such as subjective noises and slight deafness, are caused by the above described changes.

Proper School Age. Dr. Abram Jacobi says that "no child under seven years of age should be permitted to attend school." Undoubtedly very many children fail to develop, physically and mentally, on broad lines because of too early confinement in school. Parents frequently shirk their duty, and turn their children over to the school teacher, who, of necessity, tries to hammer them all into the same mould. The parent is the only one who can study the individuality of the child and thereby become sufficiently intelligent to properly manage the early stages of development. Let us keep this ever in mind. Health is a sound mind in a sound body. A sound mind is clear thinking and straight seeing.

# DIONIN IN DETACHMENT OF THE RETINA.

# THOMAS M. STEWART, M. D.,

# Cincinnati, O.

One cured case of double detachment of the retina may not prove of much importance in establishing the full value of the treatment by dionin. But enough has been learned to recommend its judicious use, because the author has simply duplicated the results of another's recommendation to use dionin in detachment of the retina.

A woman, aged 42, on July 17, 1906, consulted me because of a recent detachment of the retina of the right eye. She had been under treatment for five months for a detached retina of the left eye, with no improvement. The oculist to whom she had been going for treatment of the left eye could offer no positive assurance for a favorable result, although his treatment was based on approved methods.

Personally, I could offer nothing definite, but read to her the following from my card index of journal extracts:

"In detachment of the retina when no result has followed several subconjunctival injections of sodium chloride, I can hardly recommend too highly injection, along with the saline fluid, of one or two centigrammes of dionin; the reaction is most violent, the swelling of the conjunctiva and eyelids is enormous, but the curative result is correspondingly pronounced. By these means I have succeeded in obtaining reattachment of the retina under conditions the very reverse of favorable. The facts of the case were these: the first eye had been lost twenty years as the result of detachment. The other eye operated upon for cataract five years ago had had with 12 D. vision of ½, but for two months sight had been completely abrogated, owing to complete detachment of the retina. After twelve subconjunctival injections without result. I made one injection of two centigrammes of dionin. Two days after the little operation the retina was completely reapplied."

Unfortunately my stemographer forgot to copy the name of the author, and as I remember it, the foregoing is a translation from the French.

The patient decided to go to the hospital for the treatfent; both eyes were about equally affected, no vision, and two-thirds of retina detached in lower portion. The treatment was begun by putting the patient on a diet of fruit, nuts and vegetables. Daily bath and massage. In a week the left eye was made ready for operation; a solution of one centigramme of dionin in saline solution was injected under the conjunctiva. The violent reaction was later controlled by cold compresses. The process was aided by pilocarpin sweats, aided by hot drink and hot pack for an hour, and followed with a bath and dry clothing. The dionin injection was given July 25th, and 27th in left eye. When the ophthalmoscope showed a reattachment.

The right eye was treated July 29th, August, 1st, 4th, 7th, 12th, 17th, September 5th. Dietetic treatment followed. Pilocarpin sweats dropped after fourth injection. But no reattachment of retina in right eye was obtained, probably due to tolerance to drug having already been established.

In January, 1906, the treatment of the right eye was begun a second time. One injection of dionin reattached the retina again, patient being confined to bed for two weeks subsequently. One month later the right eye retina became detached a third time, and one injection of dionin replaced it; no relapse has been noted to date of August 14, 1906.

Improved vision did not follow reattachment of the retina; in fact, in this case the right eye did not give evidence of any improvement for six months. The retinal irritation was pronounced all of the time. The left eye, however, very soon showed improved vision, and gave but little trouble in other ways.

The main reliance for improvement was placed on the dietetic regime. Food values were obtained from fresh and unsweetened fruit, vegetables of all kinds, eggs; later in the treatment, proteid values were obtained from meat, and oil and mineral matter from nuts. The results to vision in this case are as follows:

O. D. V. 
$$^{15}/_{200}$$
. — 0.5, V =  $^{15}/_{100}$ .

O. S. V. 
$$^{15}/_{200}$$
. — I  $^{\circ}$  + 2. axis 60, V =  $^{15}/_{70}$  +.

Near work + 2.50 spherical added to distance correction, enable patient to read coarse print. But she is able to do her work, and is very thankful for the good results. Vision is slowly improving all of the time.

#### SUMMARY.

- 1. The dose of dionin for subconjunctival injection is 1 to 2 centigrammes in warm saline fluid.
- 2. Reaction sometimes is very violent, and controlled by cold compresses.
  - 3. Results are as good in old cases as in recent ones.
- 4. Patient is put to bed during treatment. Dietetic and hygienic methods are most valuable aids.
- 5. Vision may not return for months after reattachment of the retina is obtained, and a proper diet of food values from a variety of sources is necessary to obtain the best results.
- 6. Repeated injections of dionin may be used if the first injection secures no noticeable reattachment.
- 7. Tolerance to the drug, however, is soon established, and at present three injections of the maximum dose with no appreciable result call for a decided interval before the next treatment.
- 8. The author has nothing to add as to dionin's mode of action, viz., "a stimulator of the lymphatic and vascular circulation of the eye."
- 9. Pilocarpin sweats, prolonged by hot drink and hot packs, may aid in some cases.

Traction Building.

#### DISCUSSION.

G. DEWAYNE HALLETT: Although I have extensively employed dionin in ocular therapeutics, I have never used it for retinal detachment. Dr. Stewart's case, and the one quoted from his extract are most interesting, but not, I think, more so than others reported as the result of subconjunctival injection of salt solution, etc., unless it be in the perfection of the treatment aside from the dionin. I am far from saying that dionin played no part, and I am unable to say that it was not the major element. We know the physical effects of dionin, such as edema, chemosis, dilatation of capillaries and lymphatics, but I believe we do not know why it is analgesic, nor why its osmotic effect should be exerted within the eyeball more on the fluids outside than inside of the retina. Nor is the etiology of detachment settled, I believe. Leber and others having demonstrated that by vitreous shrinkage a rent forms in the retina through which vitreous enters and by gravity dislodges a greater area, etc., and such even has been reported in 39 per cent. of detachments. The contrary "diffusion theory" of Roehlmann describes the fluid as from choroidal vessels. Both theories have been confirmed by laboratory experiments. The theory of the beneficial action of hyperemic therapeutics in Bier's method of treating acute purulent otitis and mastoiditis is that the localizing within the infected area of the body fluids tends to surround the area of invasion with an artificial edema. This edema fluid is known to possess heightened bactericidal properties. Among other effects of this method it is claimed that it reduces and relieves pain. I have observed that the analgesic effect of dionin has some constant relation to the chemosis produced, and the thought therefore arises, is the drug, dionin, analgesic, or is the analgesia a physical effect of the edema, along the line of hyperemic therapeutics. Also, in the case of corneal ulcers of various kinds, are the beneficial results that follow the use of dionin due to the drug or to the local augmentation of the bactericidal body fluids? The latter, I believe.

In the case quoted by Dr. Stewart the result was a logical effect of dionin, since a full trial of other most approved measures had failed after thoro trial. His own case, with "no vision" in either eye, one an old and the other a recent detachment, was most gratifying and convincing. It is hard to imagine a greater occasion for thanksgiving than his patient must have had to have a reattachment in each eye with a vision of  $^{45}/_{100}$  and  $^{15}/_{70}$  + respectively. I notice that after the second treatment of the right eye the patient was confined to the bed for but two weeks, and that a reattachment occurred inside of a month. In my opinion the dorsal decubitus should be maintained for six weeks after reattachment.

Extraction of Cataract in the Capsule. H. Herbert, F. R. C. S. (Ophthalmoscope, March 1, 1906), states that in the conditions obtaining in the Punjab, extraction in the capsule is probably warranted. In his opinion the operation is not a conservative one, as unnecessary risks are taken, escape of vitreous occurring in skilled hands slightly oftener than in the operation as commonly performed. The amount lost, however, is small. Major Smith's percentage in 1903 was between 6 and 7 per cent. Captain Oxberg had twelve losses in forty operations. In the same locality, in five hundred and seventy-four extractions performed after the regular method, escape of vitreous occurred in but fifteen, or 2.6 per cent.

In conclusion, he states that "not a scrap of evidence has been advanced sufficient to justify removal of transparent capsule, except under urgent circumstances."

S.

# EXCEPTIONAL CASES OF LACRIMAL ABSCESS.

#### FRANCIS B. KELLOGG, M. D.,

# Los Angeles, Cal.

HE exceptional character of the cases I wish to present consists chiefly in the ages of the patients, two being little girls of five and seven, and the third an old lady of eighty-two with an impervious lower canaliculus.

As we all know, tear duct cases are trying enough in the mature adult, in which class they generally occur, but when a small child is the victim the difficulties of treatment are much enhanced.

I confess that when the first of the two tots presented herself with a well-defined lacrimal abscess, I was considerably embarrassed to know just how to treat it. A prick with a cataract knife liberated the imprisoned pus, and for a time, by using cocain, mild antiseptic injections were injected into the sac, but they were entirely adequate, and even this measure was carried out with the greatest difficulty, as she was an only child and more or less spoiled. I finally became convinced that anything like radical and effective treatment would be impossible except under a general anesthetic. From the time this course was adopted the treatment progressed steadily and rapidly to a cure. Without a complete record of the treatment, I still have no doubt that I put the child under chloroform at least fifteen times. After having once discovered that this robbed the treatment of its terrors, she would cry for chloroform as soon as she came into the treatment room. The purulent process was killed by a couple of injections of P. D. & Co,'s euformal, and after the reaction had disappeared. I slit the canaliculus and passed Bowman's probes at different sittings, up to about No. 8. The progress of the case under this treatment was both rapid and gratifying. There were no bad results from the frequent administration of The child has remained entirely well ever since, althothe child was treated four or five years ago.

With this experience for a guide it did not take me long to decide what to do when a few months ago another child presented with a

similar condition. This was also a girl, seven years old, with an abscess pointing over the sac. This was incised with a cataract knife under chloroform, and the suppurating sac treated thro the puncture. As soon as the swelling had sufficiently subsided the canaliculus was slit and probes were passed up to No. 7.

In this case after having been treated under chloroform a number of times, and having been nauseated by it, the aversion to it became so great that I was allowed to pas the probe without it, after injecting cocain into the sac. This case also made an uninterrupted recovery, and has remained well since, about eight months.

The third case was that of a lady over eighty years old. The abscess was opened and treated as in the previous cases. When, however, I came to the point of slitting up the canaliculus, it was found to be impervious. Attempts to pass the probe into the duct through the upper canaliculus failed. In fact, I have never been able to use the upper canaliculus for this purpose, altho I have read of its being done by others. That the upper passage was open was demonstrated by injecting argyrol solution into the sac turn the artificial opening. It promptly appeared at the upper puncture.

Thus I was thrown off my beaten track of procedure, and at first the prospect of re-establishing the patency of the natural passage seemd discouraging. Then this solution of the problem occurred to me. viz., since I could pass the probe into the nose thru the artificial opening, and since the natural passage into the sac, by way of the upper canaliculus was open, why not dilate the nasal part of the route thru the puncture until large enough to give reasonable assurance of permanency and then allow the puncture to heal up? Accordingly this course was adopted. Successively larger probes were passed at intervals of two or three days until No. 11 Theobald was reached. The puncture would heal up between treatments, but it was a simple matter to open it thru the fresh scar with the cataract knife.

It is customary in ordinary cases after reaching the limit of dilatation to lengthen the interval between treatments, thus holding the caliber of the duct to the largest dimensions, and being thus assured of its permanency. I regret that I did not pursue that course in this case, as I believe it could have been done, altho the difficulty of finding the previous puncture would have been augmented with the lapse of a longer interval of time. This consideration, together with the advanced age of the patient, who was showing the strain of the treatment.

led me to dismiss the case after success had apparently ben achieved and all indications of suppuration had been absent for several weeks, while a No. 11 probe was passed on two or three successive visits.

My reason for regretting early dismissal of the case is that there was a recurrence of the suppuration after an interval of several weeks, the patient in the meantime having become bed-ridden on account of extreme age. That some permanent enlargement of the duct was secured was proven by the fact that there was no recurrence of the inflammatory process, for the reason that the sac could be emptied by pressure, thus preventing retention. Absence of pain, extreme physical disability on account of age, poverty and dread of the ordeal, all combined against further treatment, so that I was not called upon to treat the case further. I learned of the partial relapse thru the daughter, who called to pay my bill, and who had been her constant attendant during treatment.

The measure of success which attended this case would indicate that in a younger person a complete cure might have been attained by perseverance.

Douglas Building.

#### DISCUSSION.

C. Gurnee Fellows: I want to congratulate Dr. Kellogg on his success in treating the cases which he reports.

I have found it quite impossible to treat many children to start with without an anesthetic, and sometimes quite as impossible to get the family and children to consent to it. I frequently have given an anesthetic for the first probing, and then found that the child unlike Dr. Kellogg's, dreaded the anesthetic more than the operation without it, and so voluntarily came around. There is a great difference in children, and I find that many of them can be induced to submit to treatment by beginning slowly and carefully and not trying to do too much at a time.

The plan of dilating and syringing without slitting the canaliculus is one that I favor very highly whenever it is possible to do it. It is necessary often to nick the punctum with a knife, but without slitting it very deeply, and after the lacrimal abscess is emptied and syringed thru the surgical opening, the treatment can often be accomplished.

I am sure that many cases have been restored without the use of the

large probes.

Such cases as those reported by Dr. Kellogg, giving his practical experience, are to my mind of more value than a lot of ultra scientific papers which advise things that we in a busy practice cannot follow.

G. DEWAYNE HALLETT: It is quite true that dacryocystitis is un-

common in children, and since they are entirely lacking in fortitude it

is proportionately more difficult to treat.

Using general anesthesia, however, as one must do in such cases, it is quite probable that the results would be as quick and satisfactory as in adults to whose procrastination effective measures might have to be delayed.

Kipp (Trans. Am. Oph. Soc., Vol. II, 537) found in reporting two years' records that six per cent. of such cases were in children under

one year of age.

My own experience is that they are much more rare.

As a rule, the purulent process subsides rapidly after free opening.

Probing is inappropriate till inflammation has quite subsided.

As in other ages the cause is at the lower end of the tube, usually, and in children, unless after exanthemata, a syphilitic periostitis and caries should be suspected.

Facial asymmetry and traumatism may be a cause.

In one case of complete atresia of the puncta, and in one of apparent congenital lack of a punctum, I have been able to demonstrate a canaliculus and keep it open, and I have been able to probe thru the upper canaliculus. With the passing of very large probes I have had no experience, that is, above a 7 or 8.

There are two kinds of X-rays: (1) Direct, which, if alone, give sharp definition even in soft tissue: (2) Indirect, coming from different parts of the tube. which fog the picture.

In suspected tuberculosis with no sputum swab the throat as for a diphtheria test, and you may make a culture even abounding in tubercle bacilli.

## PRACTICAL HINTS.

# Conducted by

G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

Treatment of Lime Burns of the Eye. As the chief danger lies in the continued slaking of the lime, instil some form of oil, as sweet oil, almond oil or milk; then remove with a pledget of dry cotton and spud or probe all traces of the lime. Do not fail to search carefully the superior and inferior cul de sacs. The extreme swelling of the conjunctiva often hides particles from view except there be very thoro investigation. The instillation of oil must be repeated every hour or two to prevent adhesions between the palpebral and bulbar conjunctiva. General inflammatory process may be controlled by aconite internally, and the ice bag locally.

Ulcer of the Cornea. When not contra-indicated by the presence of much discharge apply a pressure bandage to the affected organ. This keeps the lid quiet and gives the ulcer a chance to heal.

Symptoms of Basedow's Disease Without Goiter or Exophthalmos. Libotte has recently reported a case of Basedow's disease in a woman thirty years old. He still has the patient under observation. On the least movement she suffered from palpitation of the heart, which made walking impossible. Perspiration was habitual; tremor in the hands and arms made sewing and writing impossible. The stools were softer and more abundant than normal. The skin was always hot. Nevertheless there was no other signs of Basedow's disease, either in the neck or in the eyes. Physical examination did not show any signs of cardiovascular affection. Under the influence of the application of the galvanic current these troubles disappeared. The case is interesting from the absence of goiter and exophthalmos, and from the fact that the diagnosis was confirmed by the positive and rapid results obtained from galvanotherapy.—Le Bulletin Medical, June 2, 1906.

What constitutes Basedow's disease?

Malaria used to cover a multitude of sins, now it is something else.

### SOCIETIES.

### PRESIDENT'S ADDRESS

Before the Annual Meeting of the American Homœopathic Ophthalmological, Otological and Laryngological Society, at Atlantic City. September 11, 1906.

TOHN B. GARRISON, M. D.,

# New York City.

ELLOW Members of the Society: It becomes my pleasure to-night, and conforms with honorable custom, to address you in annual convention assembled, and I am impelled to utter as my first word an expression of my heartfelt appreciation of the great honor you have done me in choosing me as you presiding officer at this meeting—a preferment that came as a great surprise, but which is valued beyond my words to express. I sincerely thank you.

Once more we find ourselves guests in this beautiful city by the sea where, as we look backwards in our memory, it appears to be only yesterday that we were assembled here on a similar occasion, and, indeed, it seems scarcely possible that seven years have elapsed since that memorable meeting, yet such is the fact.

In seeking a subject for my address I have desired to choose one that will be of interest to us all, and I can think of nothing that will be more likely to benefit us than some thoughts concerning this, the American Homœopathic Ophthalmological, Otological and Laryngological Society—its past, present and its future, and I therefore beg your attention for a short time while we give it that consideration that our time will permit.

First, we may not unwisely take up the early history of the society, as many of our more recent members may be interested in its development and a recollection will be profitable to all.

In June, 1877, during a meeting of the American Institute of Homocopathy at Lake Chautauqua. a number of the leading eye and ear specialists of our school held an informal meeting one evening in the room of Dr. E. W. Beebe.—who is probably the only one now living who was then present—and decided that it was in their opinion wise

and timely for the eve and ear specialists to form themselves into a special society, in order that their interests might be better protected and their specialties more carefully and scientifically developed. further business was transacted at this informal meeting than to decide that they would meet together the next year, at the time and place of meeting of the Institute, to organize themselves permanently into a society to be called the "American Homocopathic Ophthalmological and Otological Society." In 1878 these promoters, with others who had become interested in the matter during the year, met according to their previous agreement during the meeting of the Institute at Putin-Bay, and formally organized the "American Homœopathic Ophthalmological and Otological Society." The officers chosen at that meeting were: President, T. P. Wilson; Vice-President, W. H. Woodyat; Secretary and Treasurer, A. K. Hills; Censors, H. C. Houghton, Jas. A. Campbell and W. A. Phillips.

Meeting at the same time and place chosen by the Institute, the next year found the members of the new society at Lake George listening to many papers and electing the following officers: President, George S. Norton; Vice-President, W. A. Phillips; Secretary and Treasurer, F. Park Lewis; Censors, W. H. Woodyat, F. H. Boynton and D. J. The fourth session was held at Milwaukee, Wis., and McGuire. elected as officers: President, W. H. Woodvat; Vice-President, H. C. Houghton; Secretary and Treasurer, F. Park Lewis; Censors, George S. Norton, J. H. Buffum and W. A. Phillips. In 1881 the fifth session was held at Brighton Beach, electing: President, W. A. Phillips; Vice-President, D. J. McGuire; Secretary and Treasurer, F. Frank Lewis; Censors, J. H. Buffum, George S. Norton and J. F. Beaumont. The sixth session was held in Indianapolis, Ind., and elected: President, Henry C. Houghton; Vice-President, C. Th. Liebold; Secretary and Treasurer, F. Park Lewis; Censors, J. H. Buffum, Chas. Deady and W. H. Winslow. The seventh session was held at Niagara Falls in 1883, and the officers elected were: President, C. H. Vilas; Vice-President, W. H. Winslow; Secretary and Treasurer, F. Park Lewis; Censors, T. P. Wilson, M. O. Terry and Jas. A. Campbell. eighth session was held at Deer Park. Md., and elected: President, F. Park Lewis; Vice-President, Jas. A. Campbell; Secretary and Treasurer, Chas. Deady; Censors, D. J. McGuire, W. P. Fowler and H. C. Houghton. In 1885 the ninth annual session was held in St. Louis, and the officers elected were: President, D. J. McGuire; VicePresident, C. W. Butler; Secretary, A. Wanstall; Treasurer, George S. Norton.

During all of these years the meetings had been well attended and the papers presented had been important and interesting, eliciting discussions that proved the society to be alive and progressive. However there began to be an impression in the minds of some of the members of the Institute that the special society detracted something from the sectional work in the Institute, and pressure was brought to induce the O. and O. Society to disband and to read their papers before the eye and ear bureau of the American Institute of Homoeopathy, believing that by so doing the national body would be better supported, and promising the new society that every advantage that could possibly accrue to them from the special society arrangement should be given if the change was made. The members of this society, always loyal to the Institute, carefully considered the request, and, although they regretted the necessity of abandoning their special society, finally thought best to do so, and the ninth session was the last for a period of eleven years.

The Institute, now having full charge of the special work, proceeded to do the best it could and appointed able and experienced chairmen for the eye and ear section, who faithfully endeavored to secure good papers and discussions, but the interest in the meetings soon began to show signs of flagging, each succeeding year proving of less interest than the preceding one, and at the meeting at Newport, in 1895, the chairman of the O. and O. section, Henry C. Houghton, with Wm. Rufus King, whose ability as an organizer is well known, found it impossible to secure papers sufficient to fill the hours devoted to one session, the specialists really seeming to have all gone into retirement. The following year the Institute met in Detroit and the discouragement of the specialists had become so great that they believed a trial of the bureau scheme no longer advisable, and as the necessity for a special society had been so fully demonstrated during the interval since the last meeting of the O. and O. Society, an informal meeting was held at the Hotel Cadillac, at which there were present about thirty of the representative specialists from all parts of the country.—and of whom there was a quorum of the old O. and O. members. A plan to reorganize the O. and O. Society and to extend its scope to include the diseases of the nose and throat was discussed at this meeting and unanimously adopted. On motion of F. Park Lewis it was voted to consider the

meeting a regular session of the tenth annual meeting of the American Homoeopathic Ophthalmological, Otological and Laryngological Society, T. P. Wilson being the temporary chairman, and E. H. Linnell secretary of this most important meeting. Officers for the following year were elected as follows: President, A. B. Norton; Vice-President, Wm. Rufus King; Secretary, Elmer H. Bissel, and Treasurer, Harold Wilson. All members of the old society were to become members in good standing upon payment of dues for the current year.

Having traced the history of the society from its inception to the reorganization we need go no further, for its history from that time is open to all through the medium of the published annual transactions, and its record is one of steady advancement and constantly increasing interest.

Altho we have met as a separate society and, at first, on the days immediately preceding the meetings of the Institute, our loyalty to that body has never wavered in the least; on the contrary we have actually been the means of increasing the attendance at the Institute by interesting our members to remain for the sessions of that body, and more than one member has been secured for the Institute thru our influence. While there have been honest arguments by able men during the years of our new existence favoring affiliation again with the Institute, the majority, in view of our past experience, has voted negatively and in my opinion wisely. We are doing good work as we are, harming none and I believe giving general satisfaction.

We occupy a position that is unique among the special medical societies in the world, in that we recognize the value of homocopathic therapeutics in addition to the various methods of cure that are employed by all and, because of this peculiarity, we have an added responsibility.

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Recognizing our duty as a homoeopathic society, our honored President. Howard P. Bellows, in his address before us at the meeting in Washington, D. C., grasped the situation and forcibly impressed upon us the urgent necessity of placing our materia medica on a plane above the just criticism of our old school friends by beginning at once to reprove our remedies from the standpoint of specialists, making use of the many instruments of precision by which the various organs and tissues can now be examined, but which were utterly unknown at the time the original provings were made. By using all the means at our command to thoroughly test the correctness of the original

provings and where errors were found to eradicate them, we would disarm those of our critics who are always reminding us that we are following antiquated provings and are far behind the age. He also recommended that the O., O. and L. Society take the initiative and show the world what could be done. Here wisdom guided our minds and his suggestion was adopted. Only one thing remained for us to do to insure the success of the enterprise and that was to insist that the originator of the idea, Dr. Bellows, be made the general director of the test provings. Fortunately for us, he accepted the charge and proceeded with his work at once, giving of his time, money and strength most liberally from that time to the present, although it has almost cost him his health to do it. To-day we have a grand monument of this labor before us in the shape of the completed records of the test provings of belladonna, which places this society on record as being the first of all medical organizations to give to the world a scientific reproving of any drug; an honorable record and one that will forever stand to our credit.

This society should not adjourn until it has officially recognized, in a suitable manner, the great debt it owes to Dr. Bellows for his untiring devotion to and masterly management of this grand homoeopathic work. Our society receives all of the honor of having carried out the work, and I confidently trust that every member will do his duty by placing an order for the book containing the records of the completed work. It is our book, for we hold the copyright. A copy should be on the shelf of every homoeopath, for it is destined to be the model from which all future provings will be fashioned.

The rehearsal of our past history will always afford us pleasure, and we trust that the history we are now creating will be equally interesting to the coming generations. We have demonstrated successfully that drug reproving on the high plane that we have chosen must be a solid foundation for our materia medica, and what we have already done has proved the general reliability of the provings given us long ago by the founders of our school of medicine, and goes far to convince the most sceptical of the truth of the law that we are proud to point to as our guiding principle.

This great work, having been so auspiciously commenced, must not be allowed to cease until the whole scheme of reproving has been elaborated. I believe however, that this work must be taken up by some other body than a society like ours, much as we might like to con-

tinue the work. Our recent experience has taught us to appreciate the many difficulties that are encountered in attempting to do such work when both examiners and provers are busy with the ordinary work of the day. It is useless to expect that one's best work can be done when the prover is obliged to visit many places far separated, to submit to the examinations of physicians busy with patients who are unwilling to give up their "turn." for it implies too much haste on the part of both the parties concerned.

We need a laboratory fully equipped with all the instruments necessary for the examinations, where the provers can meet the examining physicians without unnnecessary loss of time, and a fund sufficient to enable us to remunerate both provers and physicians for the time they have consumed.

Our work now lies in so educating the public that this work is to be for the benefit of the health of the whole world and not for the promotion of a small body of homoeopaths; for when the public realizes the importance of this work, scientific as it is, it will soon become the fashion to give money for the maintenance of such a laboratory. If we do not do it ourselves do not be surprised if the old school takes away our opportunity, for they are almost ready for such work.

An individual work that we have ever before us is the reporting of our cases, where the remedy, chosen according to the law of similia, has been successful in its action. A review of our transactions already reveals a wealth of clinical material of this kind, proving our system of cure and the present session will add to it very materially. It is a surety of a healthy minded society to find such reports when we hear so much about the decay of homoeopathy. I trust that we may find our volumes containing more of these confirmations each succeeding year.

Another timely work is that of increasing our membership. We can do much individually here, for every one of us can probably influence at least one to join who is in some way interested in the specialties we represent. We can be mutually benefited by their uniting with us; the society would gain from the moral support of the increased number and they would get inspiration from their association with us and be led to do better work. With a larger membership we might also be able to reduce our annual dues, thus lessening the aggregate amount of our annual dues from all our society connections.

With due deference to the opinions of those of my colleagues who

believe it wise to require applicants for membership in our society to first become members of the American Institute of Homocopathy, I beg to submit that I believe it to be a mistake. Not that I do not believe it to be our duty to unite with the national body, for I continually urge it, but first and foremost I believe in personal liberty of action. We cannot always know what personal feelings actuate the candidate in declining to unite with the Institute at the time that he desires admission to our society, but if they appear to him to be valid we are bound to recognize them and have no right to go further than to urge him to accept our views and change his mind. We should not deprive him of membership in this society because he does not belong to some or any-other society. No one with a proper feeling of self respect will permit himself to be forced to join any society against his will; unwilling membership is usually of scant usefulness to any body, for without an interest there can be little activity and active members are what we need. I would therefore recommend that the by-law of this society making this provision for membership be reconsidered and, if your views coincide with mine, rescinded; believing that such action will be for the best interest of all concerned.

When we come to look into the future of our society, what better guide can we adopt than the history of its past. We have always endeavored to keep well abreast of the times and to set our aim well to the top. I therefore feel assured that our future can confidently be left to those who will come to the front from time to time and with a firm assurance that whatever needs to occupy us will be dealt with upon the same high plane that we have assumed from the first. Honoring alike our specialty and our school, I commend it to their keeping.

## THE LONG ISLAND SOCIETY OF ANESTHETISTS

Will hold its December conference in the Cumberland Street Hospital, Brooklyn, between Myrtle and Park avenues, at 8 P. M., Tuesday, December 4, 1906. All interested are invited to attend.

## BOOK REVIEWS.

Practical Observations Upon the Chemistry of Foods and Dietetics. By J.B.S. K.ng, M. D., Professor of Chemistry Hering Medical College; former Professor Chemistry Hahnemann Medical College, Chicago; Secretary International Hahnemannian Association; member American Homocopathic Ophthalmological, Otological and Laryngological Association; member American Institute of Homocopathy, etc., etc. Pages 140. Published by The Blakely Printing Co., Chicago. 1906.

A concisely, clearly written valuable little volume of interest to the studious laity as well as profession, explaining the uses of food in building up the body and producing heat and energy. Giving the constituents of the several food substances and ending with the dietary for different conditions, such as artificial infant feeding, nursing mothers, Bright's disease, etc., etc.

PHOTOSCOPY (SKIASCOPY OR RETINOSCOPY). By MARK D. STEVENSON, M. D., Ophthalmic Surgeon, Akron City Hospital; Oculist, Children's Home. Akron, O.; Ophthalmologist, White Hospital, Ravenna. Illustrated; 126 pages. Philadelphia and London: W. B. Saunders Co., 1906. Price, cloth, \$1.25, net.

A well printed and well bound volume with a fairly good index and a valuable bibliography of ten pages. The fundamental principles, a clear understanding of which is essential to the intelligent practice of photoscopy, are systematically enunciated. After a brief enumeration of the names proposed for this test Stevenson gives excellent reasons in favor of his term Photoscopy:

- 1. It is not a shadow test but the observation of the size, shape, direction and rate of movement of the illuminated area of the retina.
  - 2. The illuminated area only may have its location changed.
- 3. The derivative words from this term are preferable: photoscope, photoscoped, photoscopy, photoscopist. To these we will add that shadows are observed and recorded by the X-rays—skiagram, skiagraphy—and that skiascopy should convey the idea now associated with fluoroscopy: the ophthalmologist can afford to give up this word to his fellow specialist.

Stevenson insists that uniform and complete cycloplegia must be

obtained, and that it is almost impossible to make the test correctly when the pupil is less than four millimeters in diameter.

He uses atropin: 1. In patients over fifteen years of age if of a

highly neurotic temperament.

2. In those who complain of previous failures in obtaining satisfactory lenses.

3. When homatropin has failed to give satisfactory results.

4. In those where a thoro rest of the eyes is indicated because of a wooly choroid, flannel-red fundus, shot silk retina, fluffy eye ground, or slight lenticular striations.

In patients over forty the tension should be carefully determined and the danger of glaucoma considered, also the effect on lactation in nursing mothers. If there is increased tension mydriatics are always contra-indicated. In most patients over sixty years old a cycloplegic is not necessary.

Our author evidently prefers the plane to the concave mirror. He reminds us that with the latter if the examiner's head be moved toward the patient it also approaches the source of light, and there is danger of getting so near that the light rays will not be focused before reach-

ing the observed eye.

We regret to find that Dr. Stevenson adheres to the old term astigmatism; one who advocates photoscopy in place of the older retinoscopy, etc., as a more scholarly term, may with reason be expected to lend the weight of his influence to the introduction of the more scholarly term "astigmia." That would be consistent. It is earnestly hoped that in his next edition he will make this change.

A Manual of Otology. By Gorham Bacon, A. B., M. D., Professor of Otology in the College of Physicians and Surgeons, Columbia University, New York; Aural Surgeon, New York Eye and Ear Infirmary. With an introductory chapter by Clarence John Blake, M. D., Professor of Otology in Harvard University. Fourth Edition, revised and enlarged. Pages, 485: 134 illustrations and 11 plates. Lea Bros. & Co., New York and Philadelphia, 1906.

The revision has been thoro and, interstitial, resulting in an increase of about forty pages, the replacement of many illustrations and the addition of several new plates. Those who have a former edition will want this one for its consideration of suppurative inflammation of the labyrinth, osteomyelitis, primary jugular bulb thrombosis, preparing smears from pus, making of cultivations and physiological inoculation. The paragraphs in the third edition relating to leucocytosis, lumbar puncture, and the treatment of facial paralysis have been rewritten with additions. To those not already familiar with this excellent book we have only to express the opinion that to see it is to try it, to know it to embrace.





# The Homeopathic

# Ege, Ear and Throat Journal.

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### EDITORIAL.

#### ANATOMICAL TERMINOLOGY.

HE tide of civilization, like that of the sea, rises in waves; one of these, an effort to improve the spelling of the English language, was noticed in our last editorial. Another is the effort to revise anatomical nomenclature, first proposed by Professor Burt G. Wilder of Cornell University in 1882,\* taken up in Germany five years later, in Great Britain in 1893, and culminating (to date) by the adoption, 1905, at Basle by the enlarged (German) Anatomical Society, which is international in membership, of some 4,500 anatomical names free from ambiguity for use particularly in medical schools.

This list (nomina anatomica), known for short as (BNA), was submitted to the Society by Professors Krause, v. Koelliker, His, Thane (of London), O. Hertwig, Kollman, Merkel, Schwalbe, Toldt, Waldeyer, and v. Bardeleben after six years of arduous labor. It is limited to descriptive anatomy, and to parts visible to the naked eye or thro a simple hand lens.

If the anatomical terms used in the various text books be collected into one list the total number amounts to more than 30,000. Already

<sup>\*</sup>See Introduction to Wilder & Gage's Anatomical Technology, A. S. Barnes & Co., New York, 1st edition, 1882. For a history of the whole subject (including the BNA) cf. "Neural Terms, International and National," B. G. Wilder, in *Journal of Comparative Neurology*, 1896, and later his Presidential Address to the Association of American Anatomists in 1898.

in 1885 there were 10,500 names for the known parts—about 500—of the vertebrate brain. The lack of system and the great number of synonyms not only confused and burdened the student but at times even forced him to learn another set of names upon going to another university.

The construction of the (BNA) list has led to the establishment of certain general principles regarding the formation and use of anatomical names which promise to be of great service in keeping nomenclature uniform as anatomical science continues to develop. These are: (1) each part shall have only one name. (2) Each name shall be in Latin and philologically correct. (3) Shall be as short and simple as possible. (4) The names shall be merely memory signs, and need lay no claim to description or speculative interpretation. (5) Related names shall be similar, so far as possible. (6) Adjectives, in general, shall be arranged as opposites. The Commission was forced to make exceptions: (1) The mitral valve, in deference to the clinicians, is valvula bicuspidalis and valvula mitralis. (2) It did not seem wise to abolish Sternocleidomastoideus. (5) The arteria meningea media goes thro a foramen spinosum, instead of foramen meningeum medium. As to personal names, the Commission compromised by giving each part an objective name and putting widely used personal names in brackets and in the genitive case. E. g., Lig. inguinale (Pouparti). An examination of the literature of the specialties reveals an anatomical terminology and description which varies markedly from the language and presentation of the ordinary anatomical text books; the Commission felt that it was its duty to accept the terms introduced by the specialists or to supply better ones. While the average medical student can not, in his course in anatomy, be expected to master the anatomical terms of all the specialties, he has the right to demand that his training in that direction be correct and modern. For completeness sake, therefore, the Commission has included a full list of the macroscopic structures in the special organs.

Right here we may call attention to one point that the (BNA) fails to settle: Shall we say turbinals or turbinates when we wish a synonym for the turbinated bodies? Despite the theorists synonyms are of great value, and will continue to be used. In the November, 1902, Journal of Ophthalmology, Otology and Laryngology there was a symposium upon this subject. "Turbinals" (as a noun) was preferred by Herman Knapp, Edwin Pynchon, M. A. Brandt, G. C. Stout, John M. Inger-

soll, W. F. Beggs, Geo. Strawbridge, E. F. Reamer, Mackenzie, Lennox Browne, Bosworth, Bishop, Seiler, Sajous, Gould, Dunglison, Thomas, Webster, and the Century Dictionary. "The turbinates" was preferred by Stephen H. Lutz, Linn Emerson, Edward Fridenburgh, A. A. Cannady, G. E. Malsbury, Irving Townsend and H. W. Hoyt.

As Americans we feel indignant that the (BNA) omitted to give to Professor Wilder the credit due him. His nomenclature antedates it. is much more terse—which is a great advantage in illustrations—and to our mind is equally systematic and consistent, if not more so. Professor E. A. Spitzka, of Jefferson Medical College, used it (in the nervous system) as did his father, Dr. E. C. Spitzka, in his writings. Thalamus, instead of optic thalamus, and Pons, instead of pons varolii, were proposed—published—by Dr. Wilder in 1880; the (BNA) have adopted these and others and ignored Professor Wilder.

Blakiston will soon publish the list in a book\* by Dr. L. F. Barker, which with the references in our footnote will facilitate comparison of the two systems. The movement is gathering momentum, indications point to its general acceptance by American and British writers; in fact, it would take too long to enumerate all the books, colleges and laboratories that have adopted the (BNA). A nomenclature must rely upon its intrinsic merits, it can not be forced by authority. The better it satisfies the needs of teaching and of investigation the better will be its chances of acceptance and of permanence.

The Giant Magnet was well illustrated at the New York Ophthalmic Hospital before the dozen or more post-graduate students the other day on a patient from the clinic of Dr. Hallett.

There was a history of being hit in the eye some five weeks previously by a flying particle from a nail which was being pounded. Very little distress had followed this injury, and no physician had been consulted. Failing vision at last induced the patient, who was a man of 74 years, to seek advice. The lens was found slightly hazy, there was a very small scar on the cornea. a rent in the iris and a thin black particle was observed imbedded in the lens substance.

Before the magnet this particle jumped into the anterior chamber. On removing the eye from the magnet it would fall to the lower portion, and on again approaching the eye the iron would fly up to any part of the inside of the cornea to which the tip was presented. H.

<sup>\*</sup>Anatomical Terminology.

# RESECTION OF THE SEPTUM NASI.

WILLIAM H. PHILLIPS, M. D.,

# Cleveland, O.

ROM December 1, 1905, to the time of writing this paper I have done thirty-one submucous resections for septal deformities and deviations. Prior to that date I had never done submucous resection work, altho for several years I had removed ridges and spurs with the saw and trephine submucously, and straightened deflections of the cartilage after dissecting up the membrane over the convexity thru an anterior incision. This had always been a very satisfactory method of dealing with these defects, especially the ridge and spur work, which healed rapidly and smoothly and gave excellent results.

But the drawback to the septal operations was the fact that the patient was obliged for some weeks to wear a very uncomfortable splint.

With the idea of getting rid of this objectionable after-treatment, I adopted last year the method of Killian, Freer, Hajek, Ballenger, etc., of removing entirely the deflected cartilage and bone instead of trying to straighten it; the results have been in most cases very gratifying.

Especially in the removal of large bony ridges and spurs without much deflection, have the results been ideal and the work simplified. In the treatment of marked deflections I have not been so well pleased. Several of the eariler cases showed still a considerable deflection weeks after the operation, due I presume to the fact that the removal was not thoro enough. One naturally hesitates at first, even tho supported by authority, to remove large masses of a supporting frame work, but he soon learns that here he must do that if he would make a successful operation.

My later cases, when I did not hesitate to remove much more freely the deflected cartilage and vomer and to clear the floor of any remains of the deviation, were much more satisfactory. I have had two perforations of the septum, one a small one anteriorly at the line of primary incision through the cartilage, and the other a large one occupying the site of a sharp ridge at the juncture of vomer, quadrilateral cartilage

floor. In the line of instruments I have preferred mostly to use Ball-enger's modifications of Killian's and Hajek's. Freer's set may be perfect, but for me it contains too many instruments, and anyway I long ago swore off buying instruments in sets. Ballenger's swivel cartilage knife, a modification of Killian's; his dull and sharp elevators on one handle, a modification of Hajek's; his rhino-media speculum; the Foster-Ballenger bone forceps, and Ballenger's V shaped gouge, a modification of Killian's bayonet chisel; I have found sufficient in addition to the ordinary armamentarium of the rhinologist.

For anesthesia I prefer 20 per cent. cocain on pledgets, after a spray of 1-1000 adrenalin. The infiltration method is inferior, in my experience, to the topical application. I have never seen any ill results from the strong cocain solution.

In this operation the chief difficulties with which I have met are the dissection of the membrane from the summit or ridges and spurs and along the floor, and the removal of the bony ridge giving attachment to the vomer and cartilage below. The dissection from small prominences can usually be accomplished nicely with a little care and patience, but from the long sharp ridges it is exceedingly difficult, even if one follows Killian's and Ballenger's methods of first cutting away the cartilage and bone above, and then breaking the lower fragment

I many times resort to Freer's style of incising the membrane along the summit of such a ridge and dissecting it up in two flaps, one above and one below; this simplifies matters greatly and makes it much eaiser to remove the ridge along the floor. If the concave side remains intact, no perforation occurs, and healing is but little delayed if care is taken to replace the flaps nicely when the dressing is applied.

For removing the deflected cartilage, the swivel knife is ideal, altho one must be careful not to catch it on a sharp spicula of bone and break off the blade—as I did the first time I used it. The deflected vomer and ethmoid are quickly removed, as completely as desired, by the Foster-Ballinger bone forceps. The ridge along the floor is best removed by the trephine or the gouge, the forceps failing here to take hold.

After the septum has been removed as freely as desired, if I have made a horizontal incision in the membrane I prefer to suture the flaps and dust the line of incision with campho-phenique powder. Then I use a modification of a dressing which I think is original with Dr. Teets. Several layers of gauze or lint are folded over a flat bar of

steel. Instead of soaking this in vaselin or other lubricants, as Dr. Teets does, I have followed Whiting's suggestion in mastoid dressing, and covered it with a layer of perforated rubber dam. With a second protecting bar against the flaps, this is gently crowded into position, and, if necessary, a second packing is placed on the opposite side. Hæmorrhage is perfectly controlled, and if packed snugly enough the dressing will not slip.

In twenty-four to thirty-six hours the packing is removed; the rubber dam allows the dressings to slide out easily without disturbing the flaps. The wound is dusted again with campho-phenique and a small tuft of cotton placed in the nostril operated on. Aside from cleansing, no further after treatment is usually necessary.

I have never had a case of suppuration nor a slough of the flaps, nor have I seen any external deformity or any other untoward results follow the work. Results, as has been said, have not always been ideal, but I attribute this to the operator rather than to the operation. I believe that if well done, this is the most satisfactory septal operation before us to-day.

1018-1020 Rose Building.

#### DISCUSSION.

J. F. Roe: I believe that we are all satisfied that the submucous septal operation is one of the most satisfactory additions to our list of practical everyday operations; and, if it were of less value to the patient, it is still an auspicious advent to the rhinologist and his associates, as it gives something thoroly up to date and new to disease. It comes to us at a time when we seem to have a grand opening for something new and interesting to investigate and write about. It is to rhinology what appendicitis was to abdominal surgery and mastoiditis to the aurist.

Perhaps I am the only one among us who has found the Asche operation or its modifications difficult and not thoroly satisfactory. Certain it is that I have failed to operate upon septa that ought to have been straightened, where the patient could easily havebeen brought to consent to the operation. However, if I have missed these opportunities I have partly made up for them in the past six months by sending for the patients and doing a modified Killian operation on a few of them.

In Dr. Phillips' valuable paper he speaks of operating for spurs and straight septa. I have operated only upon badly deflected septa, and yet fail to see any excuse for operation by this method for osseous and cartilaginous spurs and ridges on naturally reasonably straight septa. Certainly, we may rest assured we will retain the external form of the

nose if we remove any amount of the septal framework, but it is very hard to comprehend that a septum can be better without than with the cartilage and osseous structure if its position is equally proper. Therefore, I believe the operation has a limited field of practicability. In badly deflected septa it is invaluable; in reasonably straight septa unjustifiable, even if part of the turbinal must be excised to give the proper space. In my first case I broke a Ballenger swivel knife, but since then have used the instrument with special satisfaction.

As to dressings, I believe punk, thoroly aseptic and coated with campho-phenique, to be the ideal dressing, as it does not adhere to the wound and controls hæmorrhage without being tightly packed. I have never seen a case of nasal infection from its use, and certainly the wounds heal more kindly under its use than with gauze. It is more comfortable to the patient and so easily removed that it specially commends itself to us for this operation. Until recently I used dermatol as a dressing in these operations, and yet hardly know a reason for my change unless, by the lapse of the patent, it has become too cheap.

Dr. Homer E. Smith, of Norwich, Conn. (Ophthalmic Records, October, 1906), precedes cataract extraction with a capsulotomy; he does not make it clear whether the interval between the capsulotomy and the incision of the cornea is four hours or the few minutes necessary for the reaccumulation of the aqueous humor, we rather think the former time in hopes of re-establishing the tension of the cornea.

He applies the method only to cases suitable for simple extraction; not where the iris lacks the lustrous appearance of health, when it is rigid with little dilating ability to the pupil, not when the lens is amber colored or dark gray. During the preceding week the patient is kept on a non-nitrogenous diet, a daily warm bath and a morning saline draft to keep the bowels flushed; the nostrils are kept clean with mild alkaline washes, and to the conjunctiva is applied thrice daily a 5 per cent, solution of argyrol. He clips the ciliæ close, and on the afternoon of the day before the operation the pupil is dilated with I ver cent. homatropin. Antisepsis is applied to conjunctival sac, face and head, then asepsis and cocain. Under speculum and fixation forceps a small Knapp's knife needle is introduced thru the upper part of the cornea to the lower margin of the dilated pupil cutting to its upper border into the lens substance; a similar cut at right angles is made in the midpupillary space. If the cut in the capsule is practically invisible a large nucleus is present requiring the usual section of the upper two-fifths of the cornea. If there occurs an escape of semigelatinous lens matter a section of one-third will suffice; if there issues a milky liquid the cataract is hypermature and the section may be made with the angular keratome. Wait until the eye has recovered from the ensuing softness; there may be sufficient imbibition of aqueous to facilitate separation cortex and capsule. Final steps as usual. disadvantages are: it requires more time and trouble, asepsis must be gone twice over, it involves another wound of the cornea.

# RESECTION OF THE NASAL SEPTUM—TECHNIQUE.

HERBERT W. HOYT, M. D.,

Rochester, N. Y.

HE deviated nasal septum has been the theme of so many papers that one would think it offered nothing new for discussion.

Numerous operations and devices for its correction have been advocated, adopted and mostly discarded till a student is utterly bewildered in deciding which to use. Some of the operations have been very crude in their technique, usually with corresponding results. have been developed with consummate skill and in certain hands have yielded results very satisfactory to both patient and operator. But it remained for Professor Gustav Killian, of Freiburg, Germany, to devise the method of resecting the cartilaginous and bony portion of the septum thru one incision in the membrane, leaving the two membranous walls intact. This method was first reported in September, 1800, by Killian, and produced much discussion in his immediate locality, the very slowly adopted. Not till 1904 in Fraenkel's Archiv. fuer Laryngologie, Vol. 16, page 362, and well translated by E. Edwin Foster in June, 1905, in the Annals of Otology, Rhinology and Laryngology, did Killian make his second public and detailed report. Since then Freer and Ballenger have done valuable service in perfecting the technique and instruments for this very excellent operation.

It requires a more delicate technique to perform this operation than to do any of the other septum operations—like the Roe, Asche, Gleason. Price-Brown, etc. There is less discomfort, both at the time of the operation and following it, and the results in the main have been very satisfactory.

Freer reports on ten cases as follows: "The time elapsing between operation and examination was two years and eleven months in two cases, two and a half years in five cases and about two years two months in three cases. In five of these patients the site of the window was firm, showing that probably the cartilage and bone were reproduced. In four cases all of the window was firm, except an area in the center the size of a bean to a dime, showing that probably some cartilage had reformed from the edges of the window."

. 1

The argument has been brought forward that by this operation the nose is weakened and more easily injured. Several have reported cases where hard blows have been received on the nose after the septum was resected and no serious results followed; Freer particularly reports four cases of severe blows with no damage save epistaxis.

You are all no doubt more or less familiar with the operation, either through the literature or by its actual performance. Nevertheless a brief description of the operation will be in order to serve as an opening of the discussion of some of the difficulties encountered and the lessons learned in surmounting them.

The operation is particularly applicable in deviations of the cartilaginous portion, but can be used, in some modified form, for the restoration of any irregularity of the nasal septum.

The upright portion of the patient seems far preferable to me, though others place the patient in a recumbent position.

Before performing this operation, as well as any operation for bringing the nasal septum into the central line, any enlargement of the middle or lower turbinates on the concave side must be reduced, if it is likely to be in contact with the septum or to prevent its complete restoration.

In this operation it is especially necessary that no chance for infection of the parts may occur. Therefore, not only the interior of the nose but the exterior and any part of the face likely to be touched by the operator should be antiseptically cleansed; also the head-mirror, which is constantly being adjusted to any movement of the patient, sught to be made free from any contaminating germs.

The whole septum on both sides as far as there is the slightest deviation is then cocainized. My method is to cover the septum with cottonoid saturated with a 5 per cent. solution of cocain, leaving it in contact about eight minutes. Then the membranes are treated with adrenalin 1:3000 and are ready for the operation. Unless the deviation extends forward to the cutaneous portion of the septum I have not found it necessary to inject the cocain into the tissue.

There has been much discussion as to the best incision in beginning the operation. Killian makes his incision in a straight line diagonally upward and forward about half a centimeter back from the movable edge of the septum. Hajek and Menzel make their incisions on the free border of the cartilage curving backward at each end. White's cut is more vertical and just anterior to the deflection. Freer opens

the membrane along the crest of the deviation, followed by a cross cut of an L or inverted T shape. Some always make it on the side of the convexity, others take the side in which it seems easier to manipulate the instruments.

For my part the convex side is preferable. It seems foolish to lay down hard and fast rules as to the exact location and shape of the incision. If the deviation extends well forward the incision must be made accordingly, and it seems very unnecessary to make the incision any further forward than to entirely clear the deviation. At first I believe in making as short and straight a cut as possible to reach the parts desired, and later this can be followed by another at an angle to it, if necessary.

With the little knife designed by Ballenger I make a slightly bevelled cut anterior to the deviation from above, either vertically or diagonally, downward, according to the shape of the deviation, thru the mucus membrane and perichondrium and very slightly into the cartilage. If this is done with care it is hardly necessary to guide it by a finger inserted into the other nostril. Then with the sharp elevator of Hajek or a little dentist's burnisher, flat on one side and convex on the other, the perichondrium is loosened very slightly from the line of incision. If the elevator is between the perichondrium and mucous membrane there is great resistance, but if between it and the cartilage it usually peels up easily. As soon as the membrane is started, say, ½ of an inch, the blunt elevator is introduced and the perichondrium is separated, often as easily as a wet postage stamp.

Here is where care is to be exercised not to separate too rapidly or too early the membrane over a sharp ridge or spur. Over these places the membrane is apt to be thinner and the perichondrium or periosteum more adherent. After separating the membrane as far as necessary, return to the original incision, and by a series of slight scratching cuts with the knife incise the cartilage to, but not thru, the perichondrium on the opposite side. This can be done with the guiding finger in the other nostril, or if care is used I do not always find this necessary. Thru this incision the same process of elevation of the perichondrium and periosteum on the opposite side is performed as far as the deviation extends or till one meets some ridge or marked adhesion.

Up to this point the Myles speculum is all-sufficient; later, to hold the opening between the membranes apart, I have had the best satisfaction in using a Myles speculum with extension sliding wings, made originally to protect the septum in catuerizing the turbinals.

Now comes into play the Ballenger swivel knife for cutting out the deviated cartilage. This instrument is one of the cleverest devices of modern times. Freer and others have designed various knives for this purpose, but they all seem very inadequate in comparison with the swivel knife. In using the swivel knife, as well as any other instrument, to remove the cartilage, care must be exercised to have all the tissues freed from the cartilage or a perforation may occur from cutting a section of the perichondrium. The knife ought to be frequently sharpened, as it is easily dulled by striking spicules of bone near the edge of the cartilage.

After the removal of the cartilage the hard work begins; that of removing any portion of the vomer, perpendicular plate of the ethmoid, or maxillary ridge involved in the deviation. The periosteum is more adherent than the perichondrium, and over any sharp irregularity is apt to be thinner and more difficult to loosen. Here is where the little dental burnisher is of use in working about any nodule or ridge in loosening the periosteum. The bone when freed of its membrane is removed by forceps. Various patterns are advocated, but I find a strong pair of Myles' alligator forceps and McCoy's angular forceps sufficient. The upper part of the vomer and the perpendicular plate of the ethmoid should be punched out by forceps with as little rocking motion as possible in order not to cause any meningeal traumatism. The lower part of the vomer and maxillary ridge will stand more prying or chiseling without injuring the neighboring parts. So far I have not found it necessary to use the chisel, as urged by Killian and others.

It is of the greatest importance to keep the field of operation free of the detached pieces of bone so that one can see just where he is working. After all the deviated portion has been removed, very thoro cleansing of the intramembranous space should follow, the membranous walls put into the central line and both sides supported with septic packing. The side of the former convexity I pack quite firmly with layers of cottonoid, and the other side sufficiently to prevent bulging. This dressing is removed on the concave side on the following day, the balance in two or three days and the nose cleansed. In my first operations I used I:2000 bichloride for my antiseptic, but lately have used alphozone with satisfaction.

In a week, in an uncomplicated case, the surface is strong and one could hardly believe it had so recently been operated on. For a few weeks the septal membranes are sensitive and inclined to lightly crust

over with dry. mucus but a simple alkaline wash will be all that is necessary.

Every operator will find by experience that it is easier to vary the methods described by others. By relating the difficulties met we can learn from each other how better to overcome them.

In making the initial incision one will find that the cartilage is of varying thickness and at times on the anterior border has two strata, making it especially necessary to use care in incising it alone, and not the opposite membrane. When a spur or ledge on a deviation has been previously removed by a saw or trephine it is almost impossible to dissect up a membrane of any value, but if the opposite membrane is strong over the same area the space ought to heal well with a little extra time.

If by chance an opening is made in the distal membrane and not directly opposite that in the proximal the healing is usually good if the edges are nicely coapted. But openings in the membranes opposite each other are quite apt to leave a perforation which will remain. In only one case did I take stitches to assist in approximating the edges of the flaps. For the intranasal suture the set of needles designed by Roe is very satisfactory.

If the bony portion of the deviation is not entirely removed, the slightest remaining edge of the deviation will prevent the membranous wall from staying in the central line.

It is surprising how slight the reaction is after the operation. In one case I had a partial failure. About a week after the operation on a septum where the membrane on one side was very poor, owing to the removal of a ridge a few years before, the patient had an attack of membranous pharyngitis and rhinitis. The family physician had no culture made, so the diagnosis was questionable; as a result about one-third of the resected portion of the septal membrane sloughed, making a perforation the size of a little finger nail. One fortunate thing, as several have verified, is the fact that a perforation when the edges are only membranous is not inclined to bleed or crust as is one thru the bone or cartilage.

The time occupied in performing the resection operation ought not to be a matter for making records. It depends on the skill of the operator and the severity of the case. Killian says that twenty minutes is his average, and Ballenger reports even a shorter time. This may be easily done in a simple case of cartilaginous deviation, but where the

bone is involved, one should not allow his desire to save a few minutes to interfere with his doing the most careful work.

The technique of this operation will no doubt be improved and better instruments for its accomplishment designed, but the principle seems good, and many think it an operation that has come to stay. Certainly rhinologists should rejoic to have the place of the various crushing operations for restoring the nasal septum.

33 Clinton Avenue Bouth

"jul **19** 1912

GEORGE B. RICE: Concession operation of the nasal septum, I am one of those on the conservative side. It seems to me, as with all new things, that the operation has been attempted many times where another method would have produced better results. Dr. Hoyt has quoted as an authority a certain operator in my city, a man who has written a great deal on the subject and has no doubt performed the operation many times. He has claimed phenomenal results with few failures, but, so far as I know, has made no report of producing conditions which were infinitely worse than the original nasal obstruction.

My personal experience has taught me that the operation is not free from danger, that perforation of the septum, which may or may not be troublesome, can easily be made, and that permanent external deformity is not impossible.

It has been claimed by originators of this method that the septum does not act as a support to the nasal bones and the cartilaginous structures which form the outlines of the external nose, that these structures are entirely independent, and that the nasal septum can be fully resected without thought of external deformity.

I do not lay claim to equal or greater knowledge than these authorities quoted in Dr. Hoyt's paper, I simply know that I have seen a case of external nasal deformity caused by resection of the septum and I have also seen external deformity of the nose resulting from syphilitic ulceration of the septum where the cartilages and bones of the external nose were unaffected by the disease. These cases I have personally observed, and no one can convince me that such an accident cannot occur.

Please do not misunderstand me; I am not condemning the operation when carefully done in a properly selected case. I do condemn this operation, however, when it entails the removal of large portions of the cartilaginous and bony septum.

During the recent meeting of the American Medical Association, one of the authorities quoted by Dr. Hoyt did a very radical and complete operation on the septum of a patient in one of our large hospitals. The result of this was that the patient died twelve hours later with

marked cerebral symptoms; so, as I have before said, the radical

operation is not unattended with danger.

I believe that a deflection of the bony septum can much better be corrected by the older method of first removing turbinal hypertrophied ecchondroses, and exostoses, fracturing the septum and holding it in place with properly fitted splints. This operation I have performed many times with satisfactory results both to my patient and to myself.

Marked anterior deflections of the cartilaginous septum involving perhaps a small portion of the vomer or ethmoid are conditions where the resection method may be employed with advantage; however, we must warn our patient that something may interfere with prompt healing, and a perforation result which may be troublesome. This has hap-

pened in several cases on which I have operated.

My plea would be then for a careful selection of the case, the proper preparation of the patient for the operation, a careful observation of the minutest details of the technique, not attempting to do the operation in the quickest possible time but to take all the time necessary to insure the best possible results. Details of the technique as carried out by Dr. Hoyt well deserve our most earnest consideration.

An optic neuritis associated with paralysis of the eye muscles suggests, in most cases, the probability that the paralysis is due to a tumor or abscess of the brain or to syphilitic or tuberculosis meningitis. Less often it occurs in paralysis due to multiple sclerosis, or to morbid processes in the orbit, implicating the optic nerve.

If a patient dates irregular or persistent cough from a time when he thinks he "swallowed" or inspired a foreign body, the fact that the physical signs elicited upon examination of the chest are peculiar—different from those found in ordinary types of bronchitis—points strongly to the presence of a foreign body.—Am. J. of Surg.

A slender fish bone lodged in a bronchus will usually not cast a shadow on the x-ray piate. In such a case bronchoscopy and auscultation are more reliable diagnostic measures. In addition to a variety of moist rales, one may hear, associated with the inspiratory murmur, or both, a musical or vibratory note, when a bone or pin lies in a bronchus.

-Am. J. of Surg.

## CLINICAL RESULTS OF SEPTAL RESECTION.

## BURTON HASELTINE, M. D.,

# Chicago, Ill.

INCE my first attempt, nearly three years ago, to make a submucous resection of the nasal septum I have applied some form of the operation in over ninety cases. By the courtesy of other operators it has been my privilege to observe results in some thirty cases outside of my own practice. As the procedure is relatively new I have made a special effort to follow the subsequent history of these patients in order to make my records as complete as possible and to give them greater clinical value.

It would be unprofitable to give a detailed report of so many cases necessarily similar in character. I have chosen therefore to present at once the conclusions which seem justified by my experience, and to support these by reference to those histories which are best illustrative. Opinions derived solely from individual observation are, of course, narrowly personal. It will be understood then that no didactic attitude is assumed and that these conclusions are advanced for the sake of comparison with those of other operators.

For convenience in presentation the subject will be considered under six headings:

- 1. Variety and character of deformities encountered.
- 2. Relative value of resection compared with other methods.
- 3. Indications for the operation.
- 4. Its contra-indications.
- 5. Considerations of technique.
- 6. Ultimate results.
- 1. Variety and character of deformities.—In my earlier study of septal anomalies I of course paid much attention to description and classification. Each one was studied in its relation to somebody's chart with the hope of determining its particular class and thus finding directions for its management. In this I encountered nothing but repeated disappointment. The division into traumatic and non-traumatic I found generally impossible. To distinguish cartilaginous from bony was almost equally so, besides being of little practical value. Classi-

fication according to shape of the deformity produced nothing but confusion. The inside of the nose presents a topography as varied as the outside, and I am convinced that arbitrary groupings are neither possible nor desirable.

I have therefore no elaborate classification to offer, but I have one suggestion which I believe is of more practical value than all such academic discussions:

Let us throw away all schematic classifications and begin with a study of the normal septum, especially in relation to its growth. Observe first the lines of separation between the bones composing the septal frame. Note that these are occupied until well into adult life by varying areas of cartilage. This is not the developed cartilage like that composing the anterior part of the septum but the cartilage which precedes the formation of bone. Even the margins of the quadrangular cartilage are slightly different from its central portion and ossification seems to go on here until a rather advanced age. With the many vicissitudes to which the average nose is subject it is easy to see that the relation of these various bone and cartilage margins is almost constantly disturbed.

Now recall what takes place between two bony fragments where exact approximation is in any way prevented. The callus which normally welds the fragments into a smooth union, being constantly disturbed and distorted, soon takes on the character of a deformity and with continuous irritation may exhibit an astonishing development. We have now an abstract idea of how septal deformities begin, and this is strikingly confirmed by clinical observation. Except in recent fractures we would expect to find each malformation originating in one of these lines of union.

In all my cases I can recall none in which this was not true. There were many, of course, with marked bowing of the cartilaginous or bony plate, but none in which this could not be explained by the encroachment of a callus somewhere along its margin. By the same reasoning we would infer that at its focal point the deformity would present the characteristics of a bony callus, being partly or wholly ossified according to the time it had existed. This, too, has been confirmed by my experience.

In only nine cases have I failed to find the malformation partly bony. Four of these were recent fractures of the quadrangular cartilage and do not, therefore, affect the argument. Even luxation of the anterior

cartilage border I have found due to crowding further back, except in five cases of congenital defect which of course belong in another category.

If it can be established that the ordinary septal deformity begins as a faulty bony union and is in its essential nature a callus, we have a basis for classification and treatment more logical than anything heretofore advanced. Classification becomes of secondary importance, while the problem of treatment resembles that presented to the general surgeon by deformities following injuries to bone. The indications are to expose and remove the deformity without injury to over-lying structures and to retain the parts in such position as to favor the growth of new tissue in a normal shape.

This is exactly what the submucous operation contemplates, and its results show an astonishing measure of success. Removal of deformity is of course immediate, while the subsequent restoration of tissue amounts practically to the formation of a normal septum. The double periosteal curtain forms an ideal nidus for the regeneration of bone, and I have seen many cases in which this had gone on until no dehiscence could be demonstrated. Resected cartilage is probably not reproduced but is replaced by fibrous tissue sufficiently firm to answer every purpose.

- 2. Relative value of resection.—One year ago, in a paper written for the official organ of this society.\* I said it would be extreme to condemn all fracturing and splinting operations as obsolete. To-day I consider them absolutely so; I will go so far as to say that the rhinologist who to-day makes a "Watson-Gleason," an "Asche," a "Roberts," a "Caboche," or any operation of such nature, is not doing himself or his patient justice. The resection method, tempered by good surgical sense, is suited to all cases and is superior to other methods in every respect. By "surgical sense" I mean first, conservative judgment in advising operation, and second, reasonable skill in suiting the procedure to individual conditions. This brings us to the consideration of our third topic,
- 3. Indications for the operation.—The indications for resection differ from those we would give for any of the other septal operations only in degree. Correction by the older methods was an ordeal so severe, with results so problematical, that it was only to be under-

<sup>\*</sup>Homæopathic Eye, Ear and Throat Journal. Nov., 1905.

taken in urgent conditions. The newer procedure is so mild and its results so certain that it is justified for the relief of relatively minor symptoms. Patients generally express surprise at the relief obtained from an operation involving so little discomfort.

In discussing indications it should be emphasized that the need for operation is rarely measured by the amount of septal malformation. In small and narrow noses with poorly developed alæ, slight deviations are often serious. Some of our best results are obtained in just such cases. In neurotic patients, too, the symptoms produced as well as the relief obtained often seem out of all proportion to the local difficulty.

The condition of the turbinals is always an important factor, and if hypertrophied they may require reduction previous to the septal operation. It will be found, though, that accurate septal work greatly lessens the need for turbinal operations.

In broad, roomy noses with properly expanding wings, extensive deformities may be quite harmless. In such cases our artistic sense should not overwhelm our clinical judgment. We have ever in our mind's eye, of course, the ideal nose with its straight, vertical septum—a thing of beauty and a joy forever. When once our patient is upon the operating table we should strive for the nearest approach to this ideal, but we are not justified in placing him there for every slight departure from it.

4. Contra-indications.—These may be stated in general the same as those for any plastic operation. One would not operate upon the nose during the course of any acute disease (even simple rhinitis), nor with the patient in a low state of general vitality. Age, of course, lessens the advisability of nasal surgery. In advanced life such an operation is more serious and the relief to be expected is not so great. On this point I think no rules can be given and each case must be considered separately. I have operated two patients sixty years of age with results most gratifying, but, as a rule, I would consider this questionable.

The presence of tubercular lesions anywhere in the respiratory tract would forbid such an operation. Syphilis is a contra-indication, except in a period of absolute quiescence. I have operated six known syphilitics. Four of these were late tertiary cases under treatment who had shown no symptoms for at least six months. Two were in the third year after infection, also under treatment and showing no symptoms. All healed promptly without complication. In one of these, one year after year extensive lesions appeared in the nasopharynx, but these disappeared with treatment and the septum did not suffer

Pus infection in the nose or sinuses would commonly forbid the operation, but in two such cases I have been compelled to make it. In each there was empyema of the frontal, with a septum so deflected as to block drainage and prevent all treatment thru the nose. These were operated from the opposite side, leaving the membrane intact on the side of infection. We thus had one side of the septum bathed in pus and on the other a plastic wound, but no infection resulted and healing was prompt in both cases. Subsequent intranasal treatment with sinus flushing per catheter cured the discharge.

5. Considerations of technique.—Upon this subject I can add little to what I said in my paper one year ago, or to the excellent descriptions given in the papers presented to-day by Doctors Hoyt and Phillips. I have made a few changes in instruments and slightly modified the after care, but there is nothing, I think, that is worthy of emphasis. I note with interest that most operators have abandoned the clubby instruments formerly in vogue for those which I consider more precise. The longer incision, also, is more generally used, and I notice that the little preliminary window seems to be quite fashionable.

This longer incision extending backward below the deformity is more important than may be at first apparent. Its first advantage is in rendering the field of operation more accessible, but it has an equal or greater subsequent value in permitting perfect drainage of the wound. With only the short anterior incision we have a closed pouch which is apt to retain blood or serum, favoring infection and preventing perfect union. I have seen such cases where fluid retention made subsequent incisions necessary.

In four cases of congenital deformity with harelip I have brought my incision forward into the integument and afterward sutured the flap. In three of these instead of resecting the entire cartilage I have removed the posterior part and swung the remainder into normal position to serve as support fir the nasal tip.

I question the wisdom of removing the entire cartilage including its anterior border. As it is desirable to hold the two flaps in close contact, I now place a support in the opposite naris for the first forty-eight hours. This can be done with tampons or with a hollow splint having a flat surface on the septal side.

6. Ultimate results.—Owing to the great difficulty of keeping such patients under observation I have definite knowledge of only sixty wherein enough time has elapsed to call the results ultimate. Meas-

ured by the older standards all of these sixty would be called perfect. That is, they had complete relief of symptoms and no subsequent annoyance. But measured by present standards my first eight cases must be considered imperfect and one I would now call a failure. In seven of these some portion of the deformity remains, and altho there is good breathway, considerable irregularities exist. In one case a permanent perforation resulted; it was my third operation and the first in which I used the compressed sponge dressing. The perforation was not primary but was produced by expansion of the dressing against the weakened septum with no support on the opposite side. The patient suffers no inconvenience, but the condition is one which at present I consider inexcusable. I have repeatedly perforated the distal membrane during operation but with a proper flap this is easily covered and need cause no anxiety. A permanent perforation seems to me an evidence of bungling either during the operation or in the subsequent care.

Three of my operations have been made solely for the relief of hay fever. In these there were sensitive areas over deflected septa with turbinal impingement, and all conditions pointing to a local cause for the attack. The first of these, a twelve year case, has passed two seasons without symptoms. The others are just finishing the first season one with no trouble and the other with slight. In one instance I have been called upon to operate upon a patient who had had a previous resection. A cartilaginous deflection had been removed but a large bony deformity remained, producing marked obstruction. The removal of this gave complete relief.

I have encountered eight or nine synechiæ of moderate extent which gave no particular trouble. In one patient there was firm union between a distorted septum and the entire lateral surface of the inferior turbinal. The man had undergone two fracturing operations and subsequently extensive cauterization. The septum was a misshapen mass of fibrous and bony tissue, and no satisfactory flap could be made. I separated the synechia by dissecting off the turbinal mucosa. I then incised the septal structure until it was plastic, removed several projecting portions and chiseled away the redundant bony base. Dressings were the same as for the ordinary resection, and, altho healing was slower, the result was a very pretty septum, indeed.

Following operation, it need hardly be said, due attention should always be paid to the development of proper nasal respiration.

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### DISCUSSION.

A. Worrall Palmer: Some three years ago I tried the resection operation on a couple of cases, and as I look back at it now, probably on account of both lack of experience and the proper instruments, they were far from successes; therefore, I abandoned this procedure until witnessing Dr. Haseltine's operations at Chicago last year. These with the recent improvement of the instruments gave such good results that I determined to try this procedure again, and have come to the conclusion that while the crushing operation may be indicated in some cases, still I believe this resection operation preferable in almost all.

From examination of a large number of cases some two or three years after a crushing and splinting operation in private practice and clinic, one finds many recurrences of the deflection. Some of these had been operated by careful and recognized operators. The reason is that it is almost impossible to deprive such springy substances as the thin and flat cartaliginous and bony plates of the triangular cartilage and the vomer or vertical plate of the ethmoid of their natural inherent resiliency by incisions and retention by splints. Have found this in some of my own cases, altho it is my custom to use the nasal splint constantly for four weeks and then at night for two weeks.

This resiliency of tissue is greater in young subjects. The mucoperichondrium and muco-periosteum are more loosely attached to the cartilage and bone in youth also. Therefore, the resection operation is particularly indicated in young persons.

Another point I have never heard mentioned is that the deflections of the septum that are really productive of harm extend far back into the vomer and perpendicular plate of the ethmoid, a position where few splints hold the fragments in place after operation.

In the majority of cases the maximum encroachment upon the narrowed naris is along the line of articulation of the vomer and perpendicular plate of ethmoid; and at the same location there is usually considerable thickening of the osseous tissue, which needs removal. When removed in the usual manner with the saw the cicatricial mucous membrane forming over the sight of operation has a great tendency to be covered with dry mucous scabs.

To my mind the above mentioned difficulty of overcoming resiliency, the retention in position and the tendency to scabbing are greatly obviated by the resection operation.

In conclusion, allow me to call your attention to the use of Dr. Hurd's punch for the removal of the thickened ridge just spoken of above; it obviates the necessity of a trained third hand to wield the mallet when using the chisel.

I have had some cases of ethmoidal and frontal troubles which I think could not have been cured had it not been for this operation. In one case the two middle turbinates were in contact with the septum, their full length greatly interfering with drainage of the olfactory

crypt. I had to first remove the turbinate on concave side of septum, then straighten septum, and finally remove opposite turbinate, which latter was forced over in contact with lateral wall of nose. If I had used the old crushing operation, keeping the gauze in place until healing was accomplished, there would have been so much pus retained that it would have certainly aggravated the frontal condition and possibly set up meningeal trouble. I think I can say that the success of that case was due to this operation.

JOSEPH H. BALL: My experience in this line dates from a year ago, and I hope I shall never again be guilty of doing a crushing operation upon the nasal septum. I have had several cases with a tendency to perforation, but they turned out well in the end. In several cases in which there was retarded healing of the flap, I resorted to insufflation

of powdered sulphur with excellent results.

One case of this kind looked very bad for a time. I was very anxious about it for several days; it came out excellent under the use of sul-

phur; the relief and improvement was something remarkable.

For anesthesia I use three or four per cent, of cocain by the infiltration method, following it with adrenalin. The operation has been painless, and there has been no hæmorrhage. In two cases I had marked synechiæ, one with complete obstruction of the nares. In these I got no perforation. I began the use of insufflation of powdered sulphur in atrophic rhinitis, and found that it simulated better than balsam Peru. This experience suggested its use in these cases where stimulation was needed, and the results all that could be asked.

H. W. HOYT: It is a satisfaction that there is some opportunity for discussion, for if we all agreed upon a subject it would be rather tame. I am somewhat surprised at Dr. Rice's discussion, for it gives me the impression that he has not done the operation. He speaks of the strength of the septum after the operation; it is not advisable to remove the whole of the septum, but a narrow strip should be left along the

anterior border of the septum.

In regard to the case in Boston which died, we should know all the circumstances and the contributing causes. There have been deaths from the extraction of teeth, but the fact does not militate against the extraction of teeth. Also the crushing operation for deviated septum has been followed by fatal results. We have all heard of meningitis and perforations following the various operations for straightening the deviated septum.

Dr. Phillips speaks of using 20 per cent. cocain solution. I do not see the advantage in using such strong solutions in any operation on the septum. A weaker solution will penetrate deeper and give a

better anesthesia than a stronger one.

I am glad that Dr. Haseltine has brought up the subject of classification, as it seems to me that his method simplifies the matter very much. The amount of trouble due to a deviated septum is not entirely on account of the size of the deviation, but depends upon the size of the nose, the amount of catarrhal trouble and other constitutional conditions. I have seen a very slight deviation produce marked symptoms, as sneezing, loss of smell and headache.

As Dr. Palmer says, every one who performs this operation several times, after experience with the older methods, feels much gratified with the results. I have had no trouble with hæmorrhage and no infection.

W. H. PHILLIPS: It seems to me, with reference to Dr. Rice's criticism, that what Dr. Haseltine has happily called a man's surgical sense would certainly decide in favor of resection. I do not understand how a 4 per cent, solution of cocain can produce a better or deeper anesthesia than a 20 per cent. solution. I should much prefer the latter.

H. W. HOYT: The stronger solution quickly contracts the superficial capillaries, which cuts off further absorption; the cocain cannot

BURTON HASELTINE: I must first thank Dr. Palmer for the very graceful compliment paid me in his discussion. In view of this it seemes ungracious to take issue with him, but I am obliged to do so upon one point. He says that resection is especially suitable for cartilaginous deformities. As I have stated in my paper it is equally applicable to bony deformities, and it is the only operation of which this can be said. If my theory is true that 90 per cent. of such malformations contain bone the importance of this becomes apparent.

The arguments in Dr. Rice's discussion are practically all answered in the papers as read. The unfortunate conditions mentioned strongly suggest the lack somewhere of what we have called "surgical sense." This is not a fracturing operation and violence has no part in its technique. It is possible, of course, that someone in attempting a resection has fractured his patient's skull; he may even have broken his neck, which would be about as excusable and make just as good an

argument against a proper operation.

As to the use of antiseptic dressings within the nose. I am convinced that the general tendency is to overdo. In healthy noses it is best to depend upon simple cleanliness and sterile dressings. compressed sponges are easiest to apply, and can be removed in sections. leaving the layer next the wound until union is complete.

Finally, let me again urge discrimination as to conditions which call for surgical correction. The crookedest septum I ever saw I left alone. not because I feared to attempt it, for I longed to show what could be done in such a case, but the patient was forty years of age with ample breathway, and suffered no inconvenience that I could discover. I, therefore, advised no interference, demonstrating, I think, rare self-

control.

# PARTIAL TURBINECTOMY FOR THE RELIEF OF NASAL OBSTRUCTION.

## IRVING TOWNSEND, M. B.,

## New York.

T is my purpose to present the claims of partial turbinectomy, i. e., the removal of the free margin of the bone, together with its covering of mucous membrane and connective tissue, as an alternative to the more radical procedures of total ablation of the turbinates or of exsection of bony spurs and ridges on the septum, and the less radical, but generally inadequate, use of caustic agents.

As surgery becomes more highly specialized and operative technique more refined, certain steps in the evolutionary process fail to stand the test of time and experience, so we find the wisest and truest conservatism in operative measures combining in the greatest degree efficiency with the preservation of tissue and function. The conformation of the nose and the shape, size, and direction of its passages and accessory sinuses, exhibit a wider range of variation than almost any other portion of the human anatomy; this fact may account in part for the many methods devised and the radical difference in technique employed by different operators in their efforts to accomplish the same purpose.

The cosmetic effect which enters so largely into consideration in determining operative procedures on the external portion of the nose and face, does not figure at all in the choice of method for intranasal work, as conservation of function rather than anatomical symmetry is the object to be attained.

Nasal obstruction in the commonly accepted sense refers to any narrowing, distortion or stoppage of the nasal passages interfering with or preventing free nasal respiration. In a broader sense it includes any enlargement or misplacement of the turbinated bodies or any growth by which the ventilation or drainage of the superior meatus or of the accessory sinuses is unduly restricted.

While in certain parts of the nasal cavity a wound is quickly replaced by a covering of healthy mucous membrane, this is not the case when located at the usual site of spurs and ridges, viz., the inferior or posterior border of the triangular cartilage. The rapidity of repair is in pretty nearly a direct ratio to the vitality and vascularity of the tissue involved, and in this instance the structure of the inferior turbinated body offers the greatest advantages.

In view of these facts we believe that the altogether too common practice of removing septal ridges and spurs with a saw or drill is often ill-advised when by the removal of a sufficient portion of the inferior turbinate to secure the desired space much better results can be obtained. It is unnecessary to describe in detail the numerous conditions requiring the resection of a portion of the inferior or middle turbinates, or for the relief of which this operation is the initial step, but it will suffice to mention a few of the more important ones.

In seeking for the cause of catarrhal inflammation of the Eustachian tube and middle ear with its distressing sequelæ, deafness and tinnitus aurium, how frequently may it be traced to some form of nasal obstruction and imperfect drainage and ventilation of the air passages. In a few cases of deafness we find an atrophic rhinitis, and in these we are apt to find atrophic changes in the tympanum as well. In far the majority, however, it has been my experience to find some form of obstruction in the nares. It must be admitted, however, that correction of the nasal abnormality does not always remove the aural defect, as the damage may have become irremediable by reasons of advanced sclerosis, adhesions or anchylosis in the tube or tympanum.

An important point seldom referred to in rhinological or aural literatrue is the etiological relation existing between empyema or suppurative sinusitis and purulent otitis, with the dangerous mastoid complications which so frequently accompany it or follow in its wake. It it an undoubted fact that a mild form of sinusitis may exist for years without producing any symptoms sufficient to attract the attention of the patient, in which the partially drained cells or cavities contain the elements of infection awaiting only the favorable opportunity afforded by a lowered vitality or undue exposure, to become active and light up an acute inflammation which readily extends and invades the tubal orifice and middle ear. That many otherwise healthy children have a profuse mucopurulent discharge from the nose is a matter of common observation, and in such cases the presence of an acute cold is frequently all that is required to initiate a suppurative inflammation of the middle ear. The relations of inferior and middle turbinates to the superior passages, cavities and sinuses of the nose, are frequently such

as to limit or interfere with free drainage from the spaces above as well as to exercise a modifying influence on the speaking and singing voice.

Deflections, ridges and spurs of the septum, by pressure on the turbinates or by projecting far into the depressions between them, are sources of irritation that often serve to retard the subsidence of an acute inflammation, or to convert it into a troublesome chronic form of disease. Ridges and spurs, per se, seldom cause serious inconvenience except as they create obstruction to the free passage of air or the free exit of discharges.

In the earlier days when the electro-cautery was the popular means employed in reducing all kinds of obstructions in the nasal passages, we heard very little of that distressing symptom arising from the presence of cicatrices or scar tissue. Later on when this became more apparent it brought upon the work of the rhinologist a certain measure of disrepute. The lesson learned was the futility of burning tissue immediately overlying cartilage or bone, and the importance of preserving the septal mucous membrane intact as far as this may be possible. When we consider the position of the turbinates and their close relation with the tubal orifice at their posterior extremities, it is but natural that we should expect improvement in aural conditions from their removal. The improvement in the hearing and relief from distressing subjective noises by removal of hypertrophied turbinates has in my experience been more frequent and marked than when the obstruction was caused by septal irregularities.

Hypertrophy of the middle turbinates, and in a lesser degree the inferior, is a common cause of post-nasal dropping and rhino-pharyngitis, the latter being produced by the irritation caused by the presence of the secretion and the constant hawking in the effort to dislodge it. The lack of moisture due to insufficient evaporation in the nose causes the secretion to become more tenacious and to adhere more firmly to the walls of the nasopharynx. A similar condition develops in the larynx from the same causes, and the additional factor of mouth breathing.

In purulent inflammation of the frontal and ethmoidal sinuses, the first step in operative treatment is the removal of the anterior half of the middle turbinate, and if the posterior ethmoid cells or sphenoid be involved it may be necessary to remove the entire bone, thereby securing a view of the affected parts as well as affording drainage for retained secretions. Probably three-fourths of all mucous polypi have their origin and attachment to the middle turbinate, in which case it is

much more satisfactory to remove the underlying bone, both to prevent a recurrence of the growths and to give access to the ethmoid cells, which are frequently found to be the seat of polypoid degeneration.

In chronic empyema of the accessory sinuses the antrum of Highmore sometimes becomes affected secondarily by the gravitation of pus downward through the ostium; in such cases the antrum acts at first simply as a reservoir, but later on its walls become diseased by constant contact with its purulent contents. Whether the disease originates in this way or by direct extension from the nasal passage or as the result of a carious alveolar process, I have adopted the intranasal method of drainage through the inner wall. This was first proposed by Miculicz,\* but owing to the small opening made his method did not come into general use. It has recently been revived in a modified form by Curtis. Freer and others, and will doubtless supercede the methods of alveolar drainage and to a large extent the so-called radical operation of Caldwell-Luc.

The technique is simple, beginning with the removal of the anterior half or two-thirds of the inferior turbinate, then the breaking down of the interior wall of the antrum, thru which an opening should be made two-thirds of an inch in length and wide enough to admit the little finger. The advantages of this method are obvious, not the least of them is the avoidance of an offensive discharge into the mouth and perfect drainage without the use of a tube.

Hypertrophy of the middle turbinate more than any other form of obstruction affects the tone and quality of the voice, giving it the so-called nasal twang. This defect which is of so much importance to singers and public speakers may be remedied by the removal of the anterior portion of the bone, or if the upper chamber be unusually narrow it may be necessary to excise the entire body of the turbinate. In the treatment of hay fever and asthma this procedure is often followed by most gratifying results, as turbinal pressure is usually present, and in many cases is the most important causative factor. Persistent frontal headaches often result from the pressure of an hypertrophied middle turbinate, and in such cases prompt relief is experienced after operation. Mouth breathers often present a marked degree of facial asymmetry, and it is sometimes difficult to decide which is cause and which effect altho it is safe to assume that they are interdependent.

<sup>\*</sup>Langenbeck's Archives, Vol. 34, 1887.

Among the other advantages and benefits arising from partial inferior turbinectomy are the preservation of the breath-guiding function by which the current of air on inspiration is directed upward into the middle meatus by the shortened turbinate, the contour of which when the process of healing is complete has not materially changed.

The relief of post-nasal catarrh and the disagreeable hawking (screatus) and sense of nasal stuffiness, as well as increasing immunity from colds, may be included as results of this operation. The turgescence incidental to acute catarrhal inflammation does not develop points of contact, and therefore subsides more promptly. The increased air space augments the tonicity of the tissues and favorably changes the character of the excretory mucus.

Before describing my method of operating, I desire to call attention to the views of some well known specialists on this point, not so much for the purpose of contrast as to illustrate the diversity of technique employed by different surgeons, each of whom recommends a plan which has proven most satisfactory in his hands.

Phillips\* emphasizes the importance of pressure due to hypertrophy of the inferior turbinates as a cause of mental depression and interference with proper respiration, drainage and intranasal hygiene. He condemns the use of caustics and the electro-cautery, and recommends nasal scissors for the removal of the anterior portion of the bone and the cold wire snare for posterior hypertrophies.

E. Harrison Griffint advocates partial turbinectomy accomplished by the use of a saw, cutting from below upward in such a manner as not to impair its function; he has abandoned the use of adrenalin because it favors secondary hæmorrhage, and as a substitute gives quinin, two grains before meals and ten grains at bed time, combined with twenty grains of potassium bromide, beginning ten days before and continuing two weeks after operation.

D. H. Trowbridget emphasizes the importance of correcting nasal abnormalities as a prophylactic measure and as a preliminary to other treatment in middle ear catarrh and deafness. After condemning the use of the electro-cautery he describes his method of operating as follows: "If a bony spur or enlarged turbinate is to be removed my pref-

<sup>\*</sup>American Journal of the Medical Science, July, 1905.

<sup>†</sup>Medical Record, April, 1906.

<sup>‡</sup>Annals of Otology, June, 1906.

erence is for the trephine drill operated by a motor which does not revolve too rapidly. With this I drill out nearly all the bone I desire to remove, aiming to produce a large free open nostril from one-eighth to one-fourth of an inch between the outer wall and the septum."

The following method is the one recommended as having proved most satisfactory in my hands. After cleansing the nostril carefully with cotton swabs saturated with a twenty-five per cent, solution of electrozone, thin films of cotton are carried over the site of the operation, saturated alternately with a four per cent, solution of cocain and with adrenalin chloride one to one thousand or one to two thousand. Stovain has recently been substituted for cocain with considerable satisfaction. After waiting from seven to ten minutes, a suitable pair of cutting forceps or scissors is selected and the anterior portion of the turbinate removed, after which the operation is continued backwards as far as necessary, clipping off small pieces at a time. My preference in some cases is a short straight forceps, with a thin flat blade, by which the part is grasped and partially crushed, and removed by rotating the forceps two or three times.

In posterior hypertrophies a cold wire snare is my favorite instrument. The after-treatment consists in syringing with a fifty per cent. solution of dioxygen, followed by a normal salt solution, after which an ointment of calendulated albolene is freely applied and the nostril firmly packed with iodoform gauze. The packing is removed in twenty-four or forty-eight hours, the nostril cleared of clots, and the ointment reapplied, after which the patient injects calendulated liquid albolene with a dropper three or four times a day until the wounds are healed. Repair is rapid if enough tissue has been removed to prevent contact with the septum, and in my experience there has been little or no increased tendency to secondary hæmorrhage as a result of the use of adrenalin.

Friedenburg\* calls attention to the need of post-operative training in restoring proper nasal respiration and recommends for this gumchewing, singing, speaking, and at times chin bandages.

Proper intranasal hygiene is a matter to which the public, and indeed a large part of the medical profession, have given far too little thought and attention. As specialists it behooves us to reiterate and continually emphasize the importance of correcting nasal defects which

<sup>\*</sup>N. Y. Medical Journal, April, 1905.

in childhood have so much to do with physical and intellectual growth and development, and in later years are a menace to comfort and health. 62 W. 51st Street.

#### DISCUSSION.

GEORGE B. RICE: Dr. Townsend in his instructive paper has advanced some ideas which are well worth our earnest attention and free discussion. The first point I wish to consider is relative to the statement made that ridges and spurs seldom cause serious inconvenience except as they create obstruction to the free passage of air and to the free exit of discharges. This sentence is preliminary to the conclusion that we may often avoid operations on the septum by partial turbinectomy. Now. while I believe that the latter is true and that frequently it is possible to create good breathing space and promote free drainage by operative work on the turbinals, yet I feel that I must take exceptions to the first statement, which I will repeat, "That ridges and spurs, per se, seldom cause serious inconvenience except as they create obstruction to the free passage of air and to the free exit of discharges."

While I was a student in one of the foreign universities one of the things my instructor, in whom I had and still have confidence, taught me was that abnormal contact points in the nose were a source of trouble, i. e., that if a septal ridge or spur or deflection were sufficient to come in contact with the turbinal tissue on the opposite side that dis-The reason for this has been explained in a ease would result. variety of ways. The instructor above referred to believed that abnormal contact produces the same effect in the nose as would a foreign body, congestion and oversecretion resulting—this entirely apart from

the effect produced as mentioned in Dr. Townsend's paper.

Other observers and my own experience have taught me that the reflexes are frequently excited by such conditions, and coughs and hyperesthesia of the nasal tissues are natural results. When such a condition exists, removal of a portion of the turbinated bodies would not necessarily bring about relief unless the contact points were obliterated by work on the septum.

I am thoroly convinced that the majority of ridges and spurs can be removed, even when situated anteriorly, by the submucous method without materially interfering with the functions of the nose or tending to the production of excoriations and areas of scar tissue.

Dr. Townsend's method of operating on the turbinated bodies is quite similar to my own. I do not use iodoform gauze as a dressing. but in the past year have been well satisfied with a packing made of saturating the gauze in a solution of one drachm of the balsam of Peru to an ounce of castor oil. both sterilized; this combination has a rather pleasant odor, prevents the adhesions to a great extent between the gauze and the nasal tissues, thus facilitating removal, and keeps the nasal passages perfectly free from any odor even if the dressing remains

in forty-eight hours.

C. G. Fellows: I agree with the opening remarks of Dr. Townsend as to the demand for the preservation of tissue and function in undertaking operative interference upon the nose, and I personally leave many so-called deformities resulting from irregular turbinates or septal spurs, provided they do not interfere with respiration and drainage.

I likewise agree with his idea of cutting off a large portion of the turbinated without removing the whole of the turbinated body. I have long ago come to the conclusion that clean surgical cuts with the scissors, knives, saws, or what not, are better and quicker than the temporizing treatments of cauterization and hacking which I hear about from the mouths of our patients at the hands of some of our specialists.

I must confess, however, that I had not seen deafness and tinnitus removed as often as I had hoped from the surgical interference in the nose, and I cannot consistently advise nasal operation as the main form of treatment in such aural cases.

Dr. Townsend's reference to the various sinuses as the cause of aural complications is decidedly apropos. The method Dr. Townsend suggests is one of which I heartily approve as doing the work simply, quickly and thoroughly without the loss of too much tissue and followed most always by rapid healing with beneficial results.

H. W. Hoyt: I must take issue with Dr. Townsend on one point. The function of the turbinal is relatively much more important than that of the septum; it is more vascular and more susceptible of changes. Therefore, if it becomes a question of removing the one or the other, I always choose the septum in place of the turbinal. I have given up using adrenalin for operating on account of its tendency to produce secondary hæmorrhage. I use adrenalin if there is hæmorrhage after, but not during operation. I use a little different procedure from that descriped. I have a pair of curved scissors with saw tooth blade to prevent slipping, which I find very useful.

A. W. Palmer: Dr. Hoyt has virtually taken the words out of my mouth; I merely wish to endorse the idea. When the obstruction or irritation can be relieved by the removal of a spur or deflection, it is far better to do that and let the turbinal alone. The inferior turbinated body is the most important part of the nares, physiologically speaking.

DR. ——: I notice that those who have spoken, pack the nose with gauze after the operation. I used to do that, but I have used a different method for the last ten months. I am careful to leave no fragments of membrane, and then I allow the air to be drawn in freely to come in contact with the operated surface; thus giving free ventilation. I have had very little trouble with my cases since adopting this method, which I got from reading a paper by Dr. Griffith.

H. W. HOYT: I did not intend to give the impression that I pack the

nose after operating: I never do.

DR. TOWNSEND: In regard to the point spoken of by Dr. Rice, I

think my statement was that contact of the septum and turbinal seldom causes trouble, unless it obstructs respiration or interferes with drain-Undoubtedly points of contact should have been mentioned as a factor. In regard to the selection of the inferior turbinal rather than the septum or ridges, the point I made was that in operating on the turbinated body you have the advantage of great vascularity, rapid healing, facility of operating and no scar tissue. In removing spurs and ridges you leave scar tissue that results in dry spots which last indefinitely: I find that the results were not so good. The scar and resulting dryness come whenever cartilage or bone is operated on. In regard to packing I have adopted that plan as a matter of safety. At one time I did not pack, but now I do. It is true that there is a great advantage in allowing a free access of air, but it is so embarrassing a thing to have a hæmorrhage at a distance from your office, that I think the feeling of security outweighs the advantages of the other. If I have the patient at a hospital I do not pack.

Oblique Eye Muscle Exercise. It often happens that the extrinsic eye muscles present a marked lack of tone, perhaps in harmony with a similar defect of the general system, so that the eyes can be used but a short time with comfort. I have found that such cases receive a considerable benefit from an exercise which I call a general, or oblique, eye muscle exercise which consists of turning the eyes to the extreme point, upward and outward, and then downward and inward (always taking time to look at something), and the reverse, upward and inward, and downward and outward.

This is repeated two or three times a day and from ten to thirty times at a time. With this I often have them apply to the eyes once a day a cloth wrung out in hot water and held in place some two or three minutes, and followed by a cloth wet in very cold water for a slightly shorter period.

This is the principal of the Scotch douche applied to the eyes. and is very tonic in its effects.

Lens Capsule, Traumatic Wrinkling of the. A young man working at a machine cutting sheet brass had a flying piece enter the conjunctiva making an incised wound midway from the cornea to the inner canthus, and probably lacerating the internal rectus muscle. It entered so firmly that it had to be withdrawn by traction. Extensive ecchymoses, reduced vision and some pain followed the injury. Under a cycloplegic no intraocular defects were apparent except that the anterior lens capsule presented a "criss-cross" of opaque lines, which on closer examination proved to be little wrinkles in the capsule. The appearance was like a basket work of varying sized split glass rods. Vision was 20/10. After a week these faded out and vision became 20/21.

### AN UNUSUAL CASE OF NASAL HÆMORRHAGE.

GEORGE B. RICE, M D.,

## Boston, Mass.

IN January, 1906, Miss A., age 18, consulted me for difficult nasal respiration. The patient was a tall blonde, of nervous temperament, and altho she had had no serious illnesses in her life she could not be called robust. She complained of backaches, headaches, and above all, of a feeling of fatigue on slight exertion. Family history fairly good. No hæmorrhagic diathesis discoverable. Her parents thought her health would be improved if she could breathe normally at night, and I concurred in this opinion.

Examination of the nose showed hypertrophy of both inferior turbinals, particularly along the floor, with mulberry-like projections of the posterior portion into the nasopharynx, the hypertrophy being more marked on the left side. The affected tissues look somewhat anemic, as tho pressure atrophy might have begun. I could find no reason definitely contra-indicating operation, and so the turbinal of the left side was anesthetized and a strip of tissue removed, extending into the nasopharynx and including a little of the turbinated bone. The local anesthetic used was a mixture freshly made of cocain, eucain and adnephrin with the merits of which you are all familiar. There was practically no hæmorrhage at the time of the operation and no unusual conditions were met which interfered with its quick completion. was packed loosely with gauze, and the patient sent to a near-by private hospital for rest and care. Forty-eight hours after the operation the dressing was removed, no unusual bleeding occurred at this time. The patient remained in the hospital two days more, went to her home in an adjoining city on the third day following the removal of the dressing, and came into my private office on the fourth day for an examination. At this time she had nearly recovered from the slight shock attendant upon the operation, and the appearance of the nose indicated that the usual prompt healing process was well under way. Miss A. was desirous of returning to a boarding school some two hundred miles away in another state the following week, and I could offer no valid objection to this plan.

On the night of her arrival I received a telephone from the local physician, who stated that no sooner had she reached the boarding school than a severe hæmorrhage occurred, and altho he had used all the means at his command to control it, he had been so far unable to do so. I made some suggestions over the telephone, which I found afterwards could not be carried out, telephoned the facts to her father, and with him started at once for the place from which the message had been received.

We left Boston at midnight and reached our destination at 9:40 the next morning. The bleeding had voluntarily ceased not long after the physician had telephoned, and both nostrils were firmly packed with clotted blood. This I removed, introduced a gauze dressing into the side of the nose from which the hæmorrhage had arisen, fixed up a stretcher from a cot bed and brought her home without much difficulty and without any recurrence of the hæmorrhage.

She was taken back to the hospital, and twenty-four hours afterwards the dressing was removed. There was no bleeding until twenty-four hours later, when a profuse hæmorrhage occurred and I was obliged to put in a postnasal packing together with the anterior one. During that night, in spite of the packing, slight recurrent hæmorrhages took place, but the dressing was not disturbed. The next day there was no bleeding, and the patient passed a comfortable night. On the following day the packing was again removed and a lighter one put in to take its place.

That I may not weary you I will only say that between January 21st and January 30th profuse hæmorrhages occurred, averaging every other day and then ceased. There were seven distinct, profuse hæmorrhages in all. The patient, of course, was extremely weak from the loss of blood and suffered from secondary anemia with mild leucocytosis, but made a good recovery.

I attempted all sorts of methods of treatment for controlling the hæmorrhage other than packing, but was unable to locate exactly the bleeding point, although I knew it came from near the posterior portion of the inferior turbinated body. Adrenalin was used as a spray, the apparently indicated remedy was constantly being given internally, ice packs to the nose and back of the neck were tried, but nothing seemed of avail except the firm posterior pack fortified by the anterior one.

With the assistance of Drs. N. H. Houghton, Conrad Smith and E. R. Johnson, she was constantly watched during the last part of the

recurrent bleeding night and day. Everything was done to diminish blood pressure, such as the administration of non-stimulating foods. absolute rest in bed, etc. Among the methods attempted other than those mentioned were the application of the cautery, both actual and by means of a bead of chromic acid. These, of course, were used with great caution, and as near as possible to the bleeding point. I am unable to state whether these applications were beneficial or not.

I have searched literature in vain for a report of a similar case in a person not a hæmaphiliac, but have not succeeded.

220 Clarendon Street.

#### DISCUSSION.

N. H. HOUGHTON: In this case Dr. Rice has met with a very unusual and trying experience. A condition has arisen which no one could have foreseen. The hæmorrhage came too late to be classed as a secondary one due to the use of a suprarenal extract. It shows the hazardous places that the rhinologist is liable to fall into, as he is constantly called upon to perform the same operation or others which are equally liable to be followed by a severe hæmorrhage.

All of us have seen a serious hæmorrhage occasionally follow very soon after the removal of a tonsil, spur, ridge or a portion of a turbinal, but to have such an alarming hæmorrhage take place ten days after the operation, when the healing process is supposed to be well advanced, is certainly very exceptional. It would seem that there must have been some ulceration and sloughing of the cicatricial tissue at the posterior portion of the turbinal. Turbinectomy is a common operation to-day, and will be performed with increasing frequency in the future, as it is the only operation at present that will give permanent relief in this form of nasal obstruction. Cauterization and electrolysis are of only temporary benefit, and are being discarded as a means of reducing true hypertrophy of the turbinals. It seems, then, that all of us who do these operations may meet with such a condition at some time.

In the management of such a severe hæmorrhage it seems to me that Dr. Rice did everything that any one could do, and he is to be congratulated in coming out triumphantly. What better can be done than to put the patient in bed under the care of a trained nurse, with physicians in almost constant attendance, and with firm posterior and anterior packing of the nasal fossa. I do not know of anything that can be more effectual in controlling such a troublesome hæmorrhage.

IRVING TOWNSEND: Fortunately for our peace of mind such cases as Dr. Rice reports are exceedingly rare. The few cases of alarming postoperative secondary hæmorrhage that I have seen have occurred previous to the fourth lay, and it has been my custom to regard the

danger period passed after the end of the third day. While there was no fault in operative technique, and more than the usual amount of care was exercised subsequently, the hæmorrhage assumed alarming proportions, even after the patient had been placed under the most favorable conditions. From the fact that there was very slight hæmorrhage at the time of operation, we may assume that no large blood vessel sinus was opened. There is no reason to regard the patient as a hæmaphiliac in the ordinary sense, although it is not unlikely that an unusual predisposition to hæmorrhage existed either because of structural peculiarities in the walls of the blood vessels, or a deficiency in the fibrin forming elements, or both. It is quite possible for a comparatively small arterial vessel to be incised at a point where it is embedded in dense fibrous tissue by which the severed end would be prevented from retracting and remain a patulous and open tube; should this occur at a point outside the range of vision and where the ordinary compression of a pack could not be exerted forcibly we would have a condition most favorable for such an accident as Dr. Rice describes.

# THE PRESENT STATUS OF THE OPERATION FOR COR-RECTING A DEFORMED NOSE.\*

FRANK B. SEITZ, M. D., Buffalo, N. Y.

CROOKED nose not only has a deleterious effect on the health, because, as is the rule in such cases, one or both meati are wholly or partly occluded and the patient must put forth much effort to obtain the required amount of oxygen, but it is a conspicuous, unsightly and humiliating deformity. No matter how well educated or how well dressed the unfortunate possessor of a malformed proboscis looks as if he had but recently emerged from the wrong end of a frantic appeal to muscular might.

Desirous as is the victim of being relieved, he is not more so than the army of rhinologists the world over. From time to time from many countries have come additions and improvements, so that now it is a pleasure to be able to state that we can bring the nose into the median line and greatly improve the patient's appearance, give easier breathing and do it without pain, without loss of blood and without danger; in other words, that this particular branch of medical science, the operation for correcting a deformed nose can be said to have reached perfection.

Austria introduced cocain, and rhinology at once took a great forward leap; in fact, the introduction of cocain and our present day rhinology are coeval. England and the United States each gave instruments to crush the septum and devised splints to put it into a semblance of smoothness and straightness. The Chicago stockyards should ever be gratefully remembered, for it was from that prosaic source we received the most valuable recent addition to medicine, the extract from the suprarenal capsule. By its use we can obtain a bloodless field of operation, which is valuable not only because there is no loss of blood to weaken the patient, but because with a clear view of the operative field more accurate work can be performed. Japan next stepped into the arena of progressive medicine when one of her sons isolated the active principle of the suprarenal capsules.

<sup>\*</sup>Read before the New York State Homocopathic Medical Society.

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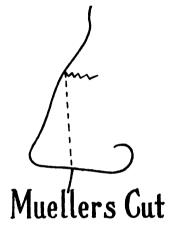
Germany gave the next improvement in nose work when Killian introduced the septal window operation. This consists of separating the mucoperichondrium in one unbroken sheet from the septum with especially devised elevators, exsecting the deformed part of the septum with various shaped knives and punches, then allowing the mucoperichondium to drop back into place like a curtain. When this is successfully performed one could not wish for better results. There is no wound except the initial incision, the cartilage is reformed and the septum becomes smooth, flat and straight. Theoretically, the Killian window operation is perfect; but, to elevate the mucoperichondrium from behind a protuberance without making a perforation is something I have not always been able to perform. Septal perforation, with the annoying accumulation of crusts, is apt to be one of the results.



After three discouraging perforations which will be permanent, it occurred to me to suture them as well as the initial incision. Using the smallest sized needle, threaded with black silk, clamped in the end of an ophthalmic needle holder, the needle placed so that it pointed in the same direction as the holder. I was able to thrust the needle into and through both edges of the perforation. The needle was pulled out of the wound by pushing it on up into the meatus until free, then withdrawing it. The knot was pushed home with the grooved end of a spatula. This suturing of rips and cuts in the mucoperichondrium has prevented any subsequent recurrence of septal perforations.

About two years ago, Dr. Ballinger, of Chicago, introduced his

swivel knife for the easier and quicker performance of the Killian operation. It consists of a half-moon shaped knife working in a swivel that plays freely between two prongs shaped like a tuning fork. As the knife cuts in any direction one can excise a piece of the cartilage in a very few seconds. The removal of the deformed portion of the septum being the prime object in most of these operations, its rapid achievement is a great desideratum, and we correspondingly honor the introducer of the Ballinger swivel knife.



What I am sure was its first appearance in print anywhere was published by the author in the March, 1906, Annals of Otology, Rhinology and Laryngology, describing an interrupted vertical cut through the septum from the tip of the nasal bone downward, and which I respectfully called the Mueller cut after my teacher, Prof. Carl Mueller, of Vienna. The Mueller cut is a most important step in bringing a crooked nose into the median line. It is done by inserting a curved bistoury into the nostril and making a cut or stab through the cartilage at the tip of the nasal bones; withdraw and make another cut the width of the knife below the first cut and continue these incisions, each time going through the cartilage, down to where the nose joins the raphé in the upper lip. The unincised portions serve to keep up circulation and hasten healing. The nose can now be swung from side to side like a door on a hinge and be set so that its tip is bisected by a line drawn from a point midway between the eyebrows at the root of the nose and the V in the center of the upper lip.

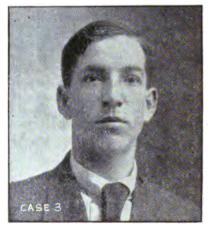
A splint is whittled from a piece of wood of a shape and size to fit and be retained in the nostril. It should extend back at least two inches so as to provide a firm leverage by resting against the side of the meatus and about one-half inch should be allowed to project out of





the nostril. The splint should be sterilized, wrapped in bichloride gauze and placed in the side toward which the nose formerly turned. Now a one inch adhesive strip is attached to the projecting end of the





splint, the nose drawn into the median line and the plaster drawn tightly across the cheek to below the ear. This dressing can be left in

place three to five days, when it must be renewed, and renewed bandages kept on for ten to twelve days.

Cases I, 2, 3 are patients who were docile enough to have their photographs taken before and after. The three cases were practically alike and were operated upon by the above method; all had one partly or wholly occluded meatus through which they breathed only with difficulty or not at all; but they now breath as well through one side as through the other. The pictures speak for themselves what a vast improvement has been made in the facial appearance.





Case 4 was operated by a method that was as original as it was unique. She was taken to the dental parlors of Dr. Hausle, put under complete anesthesia, the nose swabbed with a mixture of equal parts caprenalin and 4 per cent. cocain, and with a slowly revolving dental drill inserted alternately into the meatus of one side and then on the other, the projecting and deforming bone and cartilage were drilled or ground off, as a dentist drills a cavity in a tooth. Instead of a Roman nose in the superlative degree, she now has a nose which is not only comely and presentable but one that represents what can be done by 20th century rhinology.

### 21 North Street.

#### DISCUSSION.

DR. MOFFAT: I should think cases requiring, that is. which would be cured by, this operation must be very rare. Is the knife thrust through the whole septum penetrating each mucous membrane?

DR. SEITZ: Yes; in the Mueller cut. These cuts heal readily without leaving perforations.

### PRACTICAL HINTS.

## Conducted by

### G. DEWAYNE HALLETT, M. D., and GEORGE A. SHEPARD, M. D.

Eyestrain and Crime. A paper read before the American Academy of Ophthalmology in August, 1906, by Dr. George M. Case, ophthalmologist of the Elmira Reformatory, is made the subject of a paper by Dr. George M. Gould, in the Buffalo Medical Journal for October.

Out of 400 cases 233 were found with manifest ametropia; of these errors were corrected in 146 inmates. In 53 cases the error was between 2 D. and 4 D., in 37 over 4 D., and in 10 the astigmia was over 4 D. Conditions were imposed by the state which permitted the correction of only the most glaring defects.

For the most part no cycloplegic was used, nor were any tests of heterophoria or anisometropia allowed. Manifest errors of over 2 D. were found in 90 inmates and manifest astigmia in 108 (45 over 2 D.).

Gould states: "The state in its infinite stupidity doubly punishes them, both by imprisonment and by improper glasses; such is government wisdom. Put the glasses which these inmates require upon 108 out of any 400 moral and well-raised boys of 12 years of age and they will, by the distress so caused, either get into a reformatory, a hos-

pital, or their graves within a few years.

"Let the legislators work or read for one day with such glasses (creating thereby the defect which these boys have by nature) and they will see a great light on the subject of eyestrain. The state will not pay an oculist for this work, nor let him do his work scientifically, it will not buy these glasses, nor does it care to have the glasses fitted by an expert optician. What amazing blundering." Letters were sent to 123 penal institutions asking if the visual acuteness was tested when the boy or prisoner was received, were glasses prescribed; the effect on conduct, if oculists were employed; were there any appropriations for such work, etc.

Of these institutions 63 failed to report. Of the others 62 per cent. have no oculist; 5 per cent. have no optician, and only 16 per cent. have any appropriation. In some the patients are allowed to pick out for themselves such glasses as seem helpful from a basketful of glasses supplied. Thus is the science of Donders made practical.

Of those who did receive glasses at Elmira even after the crude method allowed the report is that "the general progress was greatly improved, and far better results were obtained in their management than heretofore."

#### SOCIETIES.

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#### AMERICAN SURGICAL TRADE ASSOCIATION.

At a meeting of the American Surgical Trade Association in Philadelphia, June, 1906, it was resolved that after January, 1907, the trade adopt the French scale for all catheters, bougies and sounds.

A committee was appointed for the purpose of getting a proper and accurate French scale card, which will be distributed by mail.

Every physician will see the importance of the step, as all are acquainted with the annoyance of having catheters, bougies, sounds and other instruments marked in American, English or French numbers.

All are requested from above date to use only the French scale in ordering such goods, and when no scale is specified, orders will be filled by the French scale.

### BOOK REVIEWS.

A TREATISE ON THE MOTOR APPARATUS OF THE EYES. Embracing an Exposition of the Anomalies of the Ocular Adjustments and Their Treatment, with the Anatomy and Physiology of the Muscles and Their Accessories. By George T. Stevens, M. D., Ph. D. Illustrated with 184 engravings, some in colors. 496 pages, royal octavo. Bound in extra cloth, bevelled edges, \$4.50, net. F. A. Davis Company, Publishers. 1914-16 Cherry street, Philadelphia.

This, the latest, is the most exhaustive, systematic book on the physiological actions and anomalous disturbances of the motor apparatus of the eye. The clearness and the thoroness with which the general principles are laid down warrant the assertion that it will be years before this book is supplanted; its foundations are so well laid that it may be supplemented ere very long; as our knowledge may advance the more systematically because of it. In the physiological division our author has not hesitated to place new interpretation upon known phenomena, and he has advanced a number of entirely new views while placing some of the older views in a new light. His system of arranging and elucidating the principles upon which depend the anomalies of the motor apparatus of the eyes may be regarded as new. He restates, as confirmed by his experience of nearly thirty years, that "Difficulties of adjustment of the eyes are a source of nervous trouble, and, more frequently than other conditions, constitute a neuropathic tendency."

A dozen or more pages are devoted to facial expression resulting from conditions of the eye muscles.

The following definition, "is almost the only point concerning the phenomena of horopters on which investigators—those who have conceded a horopter—have agreed:" "A horopter may be defined as consisting collectively of all the points in space whose images, with a given adjustment of the eyes, fall upon corresponding points of the two retinas." The innate impulse to form a practically complete horopter with any given fixation is so imperious that only insurmountable obstacles will serve as a restraint. The clinoscope demonstrates that the vertical meridian of the retina is at a right angle with the horizontal, that its leaning is a natural defect varying in, and peculiar to, various individuals. Stevens calls these leanings declinations. The importance of this subject is found to increase with our study of it. Declination and heterophoria are so mutually interdependent that one can not be successfully studied without the help of the other. Many of the symptoms of declinations are similar to or the same as those attributed to heterophoria; one of the most common and persistent is dryness and a sensation of smarting or of sand in the eyes; the hyperemia at once disappears when the declination is corrected. Stevens finds uniformly with myopia a high degree of declination: "the forward pull of the obliques makes the eyeball prominent and gives it an apperance more or less goggled." But he does not tell why the obliques pull forward (with such effect) only myopic eyes! "Not unfrequently" does our author find that after a correction of declination a pre-existing astigmia disappears or is modified in degree or direction; so much so that "for a number of years [he has] reserved the prescription for cylindrial glasses in astigmic cases in which [he is] treating declinations until after the declination treatment is finished.'

Dr. Stevens has come to the conclusion that the cases of heterophoria in which any important relief is derived from the wearing of prisms are extremely rare, and that a prism exceding 3° is worse than useless for spectacles.

RETINOSCOPY (or Shadow Test) IN THE DETERMINATION OF REFRACTION AT ONE METER DISTANCE, WITH THE PLANE MIRROR. By JAMES THORINGTON, A. M., M. D. Fifth edition, revised and enenlarged. Pp. 67, 54 illustrations, ten of which are colored. \$1.00, net. Philadelphia: P. Blakiston's Son & Co., 1908.

The demand for a fifth edition so soon after the last large one tells the whole story; suffice it for us to say that the whole work has been brought up-to-date, except that no reference is made to Stevenson's name, Photoscopy, altho Dr. Thorington cautions the beginner par-

ticularly to watch closely "the illumination at the center of the pupil and to avoid looking for shadows." Again we express our regret that Dr. Thorington has allowed Oliver and Copeland to shove him to the rear insomuch as he persists in teaching the wrong term astigmatism instead of astigmia.

PREVALENT DISEASES OF THE EYE. By SAMUEL THEOBALD, M. D., Clinical Professor of Ophthalmology and Otology, Johns Hopkins University. 551 pages, octavo; 10 colored plates, 219 text illustrations. Cloth, \$4.50, net; half morocco, \$5.50, net. Philadelphia and London: W. B. Saunders Co., 1906.

The general profession is to be congratulated upon the appearance of this book; it is written in an easy and clear style and not impracticable. The author has taken into account the fact that the great majority of physicians are not skilled in the use of the ophthalmoscope; that they have neither the experience nor the apparatus to make trustworthy tests of refraction, of the muscles, nor of the fields; that they are not qualified to perform the more delicate operations; therefore, the general practitioner is hopelessly handicapped as regards diagnosis, and consequently the treatment, of many important eye affections. One of the purposes of this book is to help the general practitioner discriminate between these cases and those which are without his province; and also to make clear to him the sharp line to be drawn between those diseases in which delay in the employment of remedial measures is permissible, and those in the treatment of which time is an all-important factor.

Definite information is given as to the more frequently encountered diseases of the eye; the simpler operations, which he may perform are described in detail; and as to treatment, our author recommends definitely, clearly, and concisely as practicable just that which he knows, from his own observation, is best adapted to the condition under discussion.

The illustrations are excellent—as are the binding, paper and printing. We are very sorry, and surprised, to see that Dr. Theobald has allowed his pen to substitute for the verb "diagnose" the inexcusable "diagnosticate."

THE EYE AND THE NERVOUS SYSTEM. Their Diagnostic Relations by Various Authors. Edited by Wm. Campbell Posey, A. B., M. D., and William G. Spiller, M. D. Illustrated, 988 pages. Philadelphia and London: J. B. Lippincott Co., 1906.

At last it is possible to find in one book the diagnostic relations between ophthalmology and neurology; heretofore no one could obtain in any language a thoro knowledge of the ground common to both without laboriously consulting numerous separate authorities. Not only must every ophthalmologist and every neurologist have this book, but every physician and surgeon will find it fascinating reading and of invaluable practical assistance to the understanding of many a case which otherwise he would be obliged to slur or even mistreat. To many the index may be of especial value, in that it contains a large number of new terms which, even if to be found in a dictionary would not there be so well explained as in this volume.

"Constant maintenance of the head in a constrained position, to obviate the diplopia due to a paralysis, has, in some instances, produced a torticollis," writes Alexander Duane. The reviewer has a patient with great torticollis and rotary lateral scoliosis due, in his opinion, to malposition of the eyes: one being markedly lower than the other.

Perhaps the titles of the chapters will give a crude idea of the scope of the work. Where overlapping of the subject occurs both the ophthalmological and the neurological phases of the matter are presented. The twenty-three chapters treat of: The intracranial portion of the encephalic nerves. The structure and optical properties of the eye. The psychology [rather the physiology] of the visual act and the focal diseases of the visual cortex. General examination of the exterior of the eye, color blindness, subjective visual sensations, amblyopia. The extra- and the intra-ocular muscles; the latter considers only the iris, the pupillary light reflex arc, etc. Peripheral affections of the 5th, 7th and cervical sympathetic nerves, ocular lesions caused by them; treatment. Diseases of the retina and the optic nerve. "The optic nerve arises and terminates within the retina, and the structure commonly called the optic nerve is in reality a part of the brain," Tumors and lesions of the brain. Bulbar and pseudobulbar diseases. multiple-, pseudo- and diffuse sclerosis, etc. Parasyphilitic affections, insanities, and toxic encephalopathies; the ocular symptoms of paresis, of tabes, of alcohol and lead intoxication. Abnormalities in development of brain and skull. Diseases of the spinal cord and spinal nerves. Neuroses and psychoses. Migraine, tetanus, tetany, epilepsy, blindness due to uremia and other blood states. Neuroses and other conditions caused by refractive errors and imbalance of the extra-ocular muscles. effects of lenses and operations. Vertigo, chorea, other spasmodic head movements, gastric disturbances, asthenopia. Exophthalmic goitre. Relief of insanity by operations upon the eyes, mental disturbances after operation on the eves, bibliography. The surgical treatment of intracranial lesions causing disturbances of vision. Tremors, reflexes, gaits. Degeneracy, the bearing of constitutional deviation upon the estimation of eve strain symptoms.

We are glad to see that hemeralopia and nyctalopia are no longer confused, altho the fact of the old confusion is recognized to the extent of saying: "Hemeralopia (sometimes called nyctalopia), or day blindness, constitutes a peculiar hyperasthesia of the retina in which vision is decidedly worse when the patient is exposed to bright light." In the next edition we trust that the above will read "miscalled nyctalopia." We think the proof reader misrepresents Dr. Casey A. Wood by making him say that "Nyctalopia, on the other hand, occurs in a sensitive retina. The person so affected sees fairly well in ordinary daylight, but the moment the intensity of the illumination is reduced vision is much worse." Such a retina should better be termed (at least partially) insensitive.

Perhaps the most interesting chapter is that devoted to the areas and centers of vision speech, mind and word blindness and dumbness, etc.

It is very gratifying to note that Dr. W. N. Souter is so scholarly as to use the term astigmia in his chapter discussing the optics of the eye; we regret that Drs. Risley and Hansell adhere to the old inaccurate words "astigmatism" and "astigmatic."

The illustrations are admirable; we note photographs showing compensatory poses of the head characteristic of paralysis of extra-ocular muscles. The facial expression in asthenopia is also described.

The book fills an important niche and must be classed at once as a standard work. The Lippencotts have lived up to their reputation; the colored plates, typography, paper and binding afford a fitting setting.

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